## Introduction and Plant Medicines for Anti-Aging

Hi, I'm Doctor Sanjeev Gupta, and you're listening to the advanced Anti-Aging and Technology Summit. And today my guest is Christopher Killam. Also known as the Medicine Hunter. How are you, Chris?

I'm good. Sanjeev. Thanks for having me on today. How are you? Are you good? I'm doing good. I specifically want to just guest. Because your expertise and and plant medicines, and we're talking about anti-aging today.

So I wanted to get your thoughts about, you know, what you think are the most important, plants out there that we should be thinking about. And, you know, to live basically a a, in harmony with, with our bodies and our minds.

I'm going to start out with two plants that will have people, some people will be going, okay, finally right on. And other people will be objecting and they are coffee and chocolate.

Yeah. Let's start there. Okay. Coffee? I know there's been a lot of nonsense about coffee.

## Coffee and Chocolate as Health Foods

For a long time. Some of the health advocates in the 30s and 40s especially, were down on coffee and called it toxic and blah, blah, blah. Coffee is one of the healthiest substances you can put in your body.

It is the greatest dietary source of beneficial antioxidants in the American diet. The chlorogenic acids in coffee, which are a large group of compounds, balanced blood sugar and help to maintain healthy blood vessels and regulate heart activity and improve mood and, you know, help to reduce the risk of certain types of cancers.

And on and on and on and on. There are people about 15% or so of the adult population is caffeine intolerant. You know who you are. If you're one of those, you drink a cup of coffee at noon and you're awake at midnight.

Okay. That's caffeine intolerant. So decaf is right for you. But in terms of the rest of the population, a couple of cups of coffee a day is nothing but good news.

And we see from huge epidemiological studies, and I mean, as many as 64,000 people we see long on, ongoing, epidemiological studies showing that coffee drinkers have a lower rate of Parkinson's disease, much, much lower rates of colon and rectal cancers.

Brighter mood overall into older age and many other markers of better health and life. So very high on my list is coffee. Chocolate. I can hear people saying, yay!

Right now. I'm not talking about heavily sugared chocolate, but I had the opportunity to do some work with the Kuna people of Panama. They're a native group.

They've been very well studied by Harvard and other, medical groups for a long time. Because among the Kuna, there's a group of them that are so poor that the only thing they have to eat is cocoa.

That's the makings of chocolate and some bananas. And so they make this heavy, heavy, heavy gravy like chocolate drink. That they drink about five cups of a day, and that's their primary food.

And they have no incidence of heart attack. High blood pressure, stroke, or 16 types of common cancers. And they've been very, very extensively studied.

It's it's like the Greenland Eskimos who eat no fiber, but they eat such a high amount of omega three fatty acids,

they have very healthy cardiovascular systems.

So I would say coffee and chocolate, unsweetened cocoa, not Dutch cocoa, because that destroys the antioxidants in chocolate. You want non Dutch chocolate, but I'd start there.

## Ashwagandha, Rhodiola, and Health Extension

I would say that in the plant kingdom, some of the herbs that are associated with longevity include ashwagandha, ashwagandha. Big, big Indian plant. Yeah.

In in the Indian field of ire that, among the 7500 plants that are used in that system. Ashwagandha is number one. It's the root that gets used. It's very good for the brain, and it's good for sexual health.

It's good for energy, stamina and endurance. It's called a Roth scion, which means a life extender. And specifically, it's called the Medea Ross iron, which is a mind enhancing life extender.

So that's a big, big agent for enhancing. You know, I'm not convinced, frankly, Sanjeev, that that looking at, life extension is really the ticket. I think it's looking at health extension.

You know, I don't want to live to be 95, but be a wreck. Whatever age I live to, I want to be healthy and able and functional and ambulatory. And, I think that there are botanicals like ashwagandha that help to do that, like rhodiola, which is another Asian root that is profound for enhancing energy and endurance and stamina and brain function and metabolism and and sexual health.

You have you have a number of botanicals out there that are in that sort of elite class of life extending, health extending agents, that if you utilize them on a regular basis, will help to keep you sharp or will help to keep you more in balance.

You won't stay healthy without exercise, though, and this is the really big bugaboo for a lot of people. You know, they want to take a pill. But they don't want to exercise.

There's no such thing as a long, healthy life for that exercise. Whether you're talking about walking, swimming, whatever it is, you don't have to go to a gym.

But exercise is key. And some types of exercise, like yoga, tai chi, are really chee kung, are really designed to help you to balance and maintain harmony in the body.

And I think those are, phenomenal things for, you know, keeping your healthier longer. I mean, I've been practicing yoga daily for 51 years, and I have no idea what life would be like without it, but I don't think it would be that great for me.

You know, so, so I think that we invest in drinking clean, pure water. Spending time in nature, eating organic foods, eating, you know, a few processed foods.

Foods. Certainly taking advantage of things like ashwagandha and rhodiola, and coffee and chocolate. I think all these things will help us. You.

## Exercise, Yoga, and Daily Wellness Habits

So I just wanted to clarify. You said what? What type of chocolate to avoid that doesn't have the antioxidant dark chocolate. Yeah. There is a process called Dutch in which, the Dutch developed, and it basically takes chocolate and it makes it less bitter.

So like cocoa. Well, let's say Dutch cocoa. But the problem with it is that destroys the antioxidants in chocolate. And that's the good stuff. So you don't want Dutch chocolate.

You want chocolate that has not been touched. And, you know, if you're making soup. What's that? Oh, it'll it'll say that. It'll say on a package like, Hershey's, chocolate or cocoa.

We'll say not a good source of dietary antioxidants, which means it's been touched, drastically. Cocoa, which is a popular, brand, is Dutch, and it'll say so.

Others may specifically say that they have not been so that, you know, that they're good sources of antioxidants. I, I heard that, when people fresh roast the coffee is when they have the most antioxidants, like, if it sits around in the antioxidants, go away.

Is that well or what? You know, keep that time. Air, moisture, heat and light will all degrade the antioxidant value of pretty much anything. If you keep coffee, you know, in a sealed container and you know it's not sitting out on your windowsill, it it'll keep for a while.

I mean, if you're going to drink coffee regularly, it'll certainly keep during that time. So I don't think that so much of a factor. I mean, I like to grind my beans fresh every morning so that I do get, you know, a good robust hit of all the good stuff.

And it hasn't been unnecessarily oxidizing as a ground coffee. That's what I prefer to do. What about, like, turmeric? You mentioned ginseng. We talked about the turmeric has really emerged.

I mean you know it's funny again in IAR Veda in the Indian system of health, turmeric. As long been regarded as one of the great botanicals to have in your life.

And it certainly plays a major role in, in Indian and Southeast Asian cookery.

## Turmeric and Ginseng Benefits

Turmeric root, is phenomenally anti-inflammatory. And we know that inflammation is part of all chronic degenerative diseases. So if you can reduce inflammation you can reduce the risk of different degenerative health disorders.

And that's a great, great benefit. But you know, turmeric also enhances brain function, interestingly enough, and it causes our bodies to produce what are known as neuro protective factors.

So it causes our bodies to produce compounds that actually physically protect our nerves all over our bodies. So, yeah, turmeric is a big deal. Ginseng is another thing you mentioned.

You know, ginseng has been around so long and has been popular so long that that we almost forget about it at times. It's like the old standby, but it's that for a reason.

The root of ginseng, like rhodiola and like ashwagandha, makes you a stronger, gives you more endurance. You know, it's a good mental sharpening agent.

You know, you really want to, like, kind of keep your wits about you having a nice, strong cup of ginseng tea is a good way to do that, for sure. Ginseng is one of those rocks I on life extending botanicals.

No question. Do you think, these are I I'm interested in your philosophy on, Why do these plants even exist? Like, is this because of, however, with humans, are or they just it just happens to be there.

I personally think that in the, spectacular diversity of nature, we have a lot of things that are highly beneficial, for us, you know, whether it's grains, or fruits or different herbs and spices or, you know, medicinal plants.

Whether these things, co-evolved with us to, specifically serve our needs.

## How Plants and Humans Co-Evolve

I don't particularly subscribe to that idea, but I do think that plants call to us. I mean, in my work, you know, working with plants all over the world, I've unquestionably been called to different ones.

Just had something I couldn't get out of my mind, you know, like, why am I thinking about this plant constantly and then going and experiencing it in the Amazon or in Siberia or in Vanuatu or in Syria or wherever?

We do, we do for sure co-evolved. We have co-evolved with plants. We share biology with them, you know, the antioxidants that help plants to resist, premature decay, help us to resist premature decay.

You know, so for sure, you know, if you look at something like, again, say, ashwagandha, which has hundreds of naturally occurring compounds, it's going to be better for you any day of the week than any drug you can name.

You know, a single molecule compound made in a laboratory that we didn't co-evolved with. So, I don't know that these are necessarily put here for our purposes, if you will, but for sure, we share biology with plants.

You know, we breathe their ear air, we drink their juices, we eat them as foods, we wear them as clothing. We build homes out of them. We decorate ourselves in our homes with them.

You know, we use them as medicines. We use them as ornaments of all different kinds. We wear their fragrances, you know, we distill them and, and, get inebriated from them.

I mean, we do everything with plants. So we have, we have for sure, a unique co evolution relationship with plants. And that's why they're so valuable to us as health agents in general and as medicines in particular.

What are the, plants that you're most like you're looking at now? Like what? You know, like, I know you're still going out and and researching different plants and.

Well, one of the plants that really intrigues me is called Jao. GU Lan and I have investigated this, up in the, northern part of Thailand a couple of times.

It has compounds in it very similar to the compounds found in ginseng. It just has a lot more of them. So it's a leaf, not a root.

## New Plants of Interest and Ongoing Research

I've been very intrigued by Zhao Gula, and I think that it's, a future significant, product in the market. It just needs broader cultivation. But I would say that's high on the list.

A lot of the time, what I do, Sanjiv, is I go back again and again to plants that I've worked with because I, I want to maintain relationship with those plants where they derive and also relationships with the people who are behind them.

So, once we get a little bit more of a manageable situation with Covid 19, I'll want to go back to Malaysia to continue to work with a couple of plants there.

One's called Tomcat Alley, which is a section harnessing overall adaptogenic plant that is, very popular and famous there. And I'll probably continue to do some more work with coffee in different parts of the world and I and when Covid dies down, for sure, I'll go back to India and continue work with ashwagandha, which I've, you know, I've gone to India for ashwagandha, like ten different times so far.

I mean, it's something that keeps bringing me back, so, that'll probably be part of it as well. I'm just curious that what is the impact of the local environment and soil and air and things that, that that give the characteristics of plant, like the how much of that is, is related to that?

Well, it's very important, you know, for example, in the, in the 90s, Saint John's wort became very popular as an

antidepressant. Antidepressant herb.

And what we found was that there was Saint John's wort growing in Ethiopia that had, about twice the actives as Saint John's wort growing in Europe. So that made the African source a superior source.

We definitely see variations, you know, the Wisconsin ginseng, for example, that I mentioned before, has a lower value of ginseng sides than the Ontario ginseng because Ontario's colder and the roots produce more ginseng sides when it's colder.

## Environment, Soil, and Cultivation Effects

To protect the root tips from dying and the soil dying of the cold. So where a plant is grown, I mean, a good example. I was invested dating shows Andra Barry, which is another adaptogen like Rhodiola, like ashwagandha helps you to adapt to different forms of mental and physical stress.

I was, exploring it in China, and, you know, it was it was interesting and fascinating to see. But a lot of the the shows, Andra was growing, in areas that didn't really have clean air.

And there was industry nearby. And oddly, there's a Chinese man here in western Massachusetts where I live who has a 50 acre shins and or a berry farm that is organic and pure and clean.

And so it turns out that even though most churches Andrews in China, this is the preferred source because of the soil and the air and the water. So in answer to your question, it matters completely.

And what about, like a like, you know, monoculture cultivation versus let's say, these plants are growing with other types of plants. Would that change the way the ultimate characteristics of the plant?

Well, certainly, I mean, look, when you, for example, you go up into the mountains of Morocco. Almost every plant in the Atlas Mountains is rosemary. So you can grow, you harvest thousands and thousands and thousands of tons of rosemary, you know, even make a dent in the supply.

But there isn't really that much other plant life around it. Little things, not much. But let's say in forest environments, mono. Well, and and I should be clear, the rosemary is wild in Morocco, even though it's sort of a mono crop, if you will.

But if you're going to, for example, be in a tropical environment, growing kava, for example, in Vanuatu, it's better to have it intercropping with papaya and coconut and peanuts and a little bit of sugarcane and some yams and taro.

Because then you have a, more broadly healthy ecosystem. So in general, I'm always looking for, ways that people can, you know, not just monarch crop.

But then, on the other hand, I have to say, I mean, I've worked with MoCCA, in the Peruvian Andes for the, excuse me, 23 years. And, you know, people grow maca in a field.

That's all they grow. I mean, other weeds and grasses come up, but basically, it's just mocha. They're not planting it with anything else, and it does fine.

And the soil stays healthy and fertile. So I think a lot of it has to do with the crop itself and the environment you're in. Okay. Well that's I really appreciate your time too.

This is quite interesting. And I hope our listeners got some just insights of how diverse the plant kingdom is and how much impact it can have on our own, our own health.

Thank you. Oh, yes. Thank you. Sanjeev. It's always a great pleasure. You take good care. Take care.