Tap Into Your Body’s Repair System Using Stem Cell-Boosting Plant Extracts with Christian Drapeau Transcript

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Podcast Introduction and Guest Background

Hey health junkies, have you ever wondered if you could help your body heal faster, age slower, or recover from workouts like a pro just by tapping into your own biology?

Well, on today's episode of the health fix podcast, I'm interviewing Christian Drapeau. He's a neurophysiologist and internationally recognized pioneer in stem cell science.

Christian was the first to propose that adult stem cells are a body's natural repair system, a groundbreaking concept that he actually published in 2002.

Now he also detailed this in his bestselling book Cracking the Stem Cell Code. With over 23 years of research, 9 patents, and a career focused on regenerative medicine, Christian has dedicated his life's work to enhancing the body's own ability to produce stem cells.

Especially through specific plant-based extracts. He's the founder and chief science officer of Stem Regen and has spoken in over 50 countries on the power of natural stem cell support.

You might know him from TikTok, where his science bag to wellness content has gained him over 700,000 followers as stem-cell Christian. Today, we're diving into how boosting your own stem cells production can support everything from injury recovery to skin health to athletic performance and even longevity, all without the need of needles, IVs, injections, or labs.

Pretty fascinating if you ask me. Now, I goof up in the beginning of this podcast because my brain had it just really focused on that he was using plant stem cells to boost our stem cells.

But no, he is talking about plant extracts that actually boost human stem cell production. And for some reason, I just had it stuck in my head that way.

I don't know if it's my background with using a lot of stem-cells, plant-based stemcell in skincare or what, but oh my gosh, i look like a total doofus.

So this will be fun for you to have a good laugh at me and learn a ton from Christian Drapeau. Let's introduce you Welcome to the Health Fix Podcast where health junkies get their weekly fix of tips, tools, and techniques to have limitless energy, sharp minds, fit physiques, or life.

Christian Drapeau, welcome to the HealthBix podcast. My pleasure to be here. Well, I am a geek at heart and I have been geeking out on your article from back from 2012. We'll dive into that a little bit.

But most importantly, and how you came into this field and really geeking out on the research here. Give us a little background as to how stem cells found you or you found them.

How Stem Cells Became the Focus

So my background is brain research, neurophysiology, and I was hired in 1995 to study a plant that you may have heard about, Clamathlaic blue-green algae.

At the time, it was growing fast in the country. and Deshae was passed the Dietary Supplement Health and Education Act. And so the company needed to have science to back up the claims that they were making.

So the main claims were on inflammation, on the immune system, a sense of mental clarity, mood elevation. We very quickly identified mechanisms of actions and the active compounds responsible for these benefits.

But as I'm doing this research, I came across people reversing or significantly improving from a whole slew of conditions touching the nervous system, the heart, brain, well, nervous, long, pancreas, liver, skin, joint, so many different aspects of human health that the big question was, what is this one thing that this product is doing to lead to such a broad variety of health benefits?

We did a number of studies with different research centers, universities. We got good data, but never anything that was like the aha moment of like, okay, now we've discovered what it is.

Until early January 2001, when I came across an article in the scientific literature documenting stem cells going from the bone marrow to the brain and becoming a brain cell.

Now you go back in 2001, stem cells are only known to be precursors to blood cells. They don't make brain cells, and if anything, they can make other things maybe, but the brain, we know the So to see a stem cell going from the bone marrow to the brain, I thought it was an amazing breakthrough.

So I went to a local medical library to what else I could find. I found another article documenting stem cells going to heart and becoming heart cells, another one going into the liver, becoming liver cells.

It's unthinkable to think of a mechanism of action that will make stem cells become those three tissues and organs, but not the rest of the body. So that means it's just a matter of time.

Scientists were able to show that they can also become pancreas, liver, lung, and the And if so, that means they have to be the repair system of the body.

How do you have a stem cell going to the brain and becoming a brain cell and it's not its function? It has to its functions. So we published an article in the journal Medical Hypothesis suggesting stem cells are the repairs system for the bodies.

And in back of my mind, just like we have plants stimulating the immune system, What if this was a plant that was stimulating the repair system? So we acquired a flow cytometer, which is a machine to count stem cells.

We started on ourselves. It would take a blood sample, count the number of stem cell, take this blue-green algae and count number stem-cells an hour, two hours, three hours later.

And then we saw the whole phenomenon. This plant was acting as a releaser, for lack of a better term, of stems cells, so within an our we had a significant increase in stem sales on the bone marrow.

So from that point on, the last 25 years have been invested in that process and that study of stem cells, how they work and finding other plants that achieve the same outcome to essentially stimulate the body's innate ability to read.

It's so cool how we have this capability using plants because I think a lot of people have now, you know, kind of gotten into the realm of STEM cells for humans and using it for skincare as we talked about before.

we hit record in stem cell IV therapy and all of that. So a lot of people might be going, well, Christian, wait, like, how do plants mimic what we have?

Wouldn't we be better off focusing more on human plant cells versus the plants? What is it about, let's say even the Klamath Falls, you know, microalgae, what is about it that the plant's have this ability to potentially regenerate us?

Okay, just to be clear, I am not talking about plant stem cells. I'm talking plants that trigger the release of your own stem cell. Just like echinacea is not immune cells, ekinaceas stimulate your immune cell, so these are plants with

an effect on our own stem cells.

And this is to me, one of the, it's rare in history that we have those kinds of, of phenomenon. Here's a phenomenon in the body that every single human being has experienced in their lives.

Everybody has had a bone fracture, a cut, bruise, surgery, something, and they have seen that the bodies repairs. The body heals. Everyone has seen this in our lives And yet, in medicine until fairly recently, until we brought forth all this information, In medicine, there was no explanation of what is happening when the body repairs.

You get a broken bone, the doctors puts you in a cast and tells you, come back in six weeks. With no language about what's happening during that time of repair.

When you have a surgery, we say, go home and rest. Rest does not repair the bodies. It's a component, but it does NOT repair a body. What we're discovering is that it's our stem cells.

The stem cells that we have in our own body really is what repairs the body. And if you have more stem cell in circulation, you are more or greater ability to repair.

What everybody is hearing about is an injection. So you increase the number of stem-cells in circulations through an injections. We have simply documented plants that will increase a number stem of cells in a circulation not through injection, but by making your body release more.

It's really that simple. Okay, okay. Yeah, I was confused completely on how the mechanism was working here.

Plant Extracts That Mobilize Stem Cells

So okay, so using the plants to stimulate our own processes, which if I look at things and I looked at, you know, where fear lies, right, when it comes to putting someone else's stem cells, into your body, or cord blood, stem cells into the body, there's a lot there, right?

Whereas if we're using something to help stimulate our own natural production, now this gives us a whole different ballgame to look at. Correct. Okay.

Now I hope that I have my has also helped others to be like, Okay, this is where we are at, This is Where We're At. All right. So one of the things that I was intrigued by is that you had done a little bit of work with your product, Stem Regen.

And you have all kinds of different stories about specifically the joints, the cardiovascular system, things of that nature. Can you give us a bit more?

I mean, it sounds, like you said, relatively simple in terms of using the plants to be able to stimulate things. What other types of plants are we talking about here?

I saw something about sea buckthorn. I something, you know, what plants in particular besides the microalgae have you found to be helpful in stimulating?

So when we discovered the effect of this blue-green algae, the first obstacle, if I could say, so we go back in 2001 and the answer was it may just be like an artifact.

If anything, it's not true. So you need to have a mechanism of action and an active compound. So we found, so we documented that, found the active compounds, documented the mechanism of action.

And then the next question was, well, it doesn't mean anything. Putting more stem cells in circulation could be very irrelevant. So, we had to go through a proof of concept.

Then maybe it's bad for you. So we had to go through all these steps and before we could really establish it works, it is real, and it's safe. And when all of this was done, in my mind it was obvious that we evolved in symbiosis with the environment.

There cannot be just one plant having an effect on stem cells. Just like there's not only one plant having an effect on the immune system. So the question was, just like how we discovered the effect of this blue green algae, because it was leading to various types of benefits in various people, then we looked for a plant that historically had been associated with a broad variety of health benefits.

And then, we started to study them. Goji berry, medicinal mushroom, you know, all these different plants. They all have an effect. None of them were really earth shattering.

But it's when I had a chance to go into remote areas of the world, like you go to Madagascar, You go on the Tibetan Plateau. What are they using there?

What is their go-to plants that they use for all kinds of problems? So you mentioned cibactorn berry. I was traveling in China at some point, I came across a number of biochemists that had worked with the plants of Chinese pharmacopeia.

And I say, okay, you're lost on an island and you can only bring one plant. Which one would it be? Kind of a joke, but at the same time, I'm really curious what answer I am going to get.

And all three told me sea buckthorn berry. I was very surprised. So I went into scientific literature and discovered that indeed for more than 2000 years in Tibetan medicine, Mongolian medicine and Chinese medicine sea-buckthorne berry had been used for problems of the lung, of heart, cardiovascular system, pancreas.

and to accelerate the process of healing from burn to the skin, cut to skin wound, bone fracture. So when you look at this whole spectrum, it's telling me maybe we have an effect on stem cells.

I went on the Tibetan Plateau, found a farm, started to develop with then an extract, which we studied and discovered that indeed it puts about 40% more stem cell in circulation within about two, three hours.

At some point I was traveling And I had a chance to meet pharmacists, pharmacologists working in Madagascar. And they were searching for plants that it could use for neurodegenerative diseases.

So I asked them, is there a plant that the heel told you use this like it's good for everything? And at the end, they kind of introduced me to one specific species of aloe growing in Matagaskar, so of 65 species.

Only that one had been used to make one specifically product in So we develop an extract from this aloe. We called it stem alo. And when we tested it, we got so far one of the biggest response in terms of releasing stem cells from the bone marrow.

So stem regen today is the top five plants that we have documented over the past 20 years that act as stem cell mobilizers. You take two capsules and we can say that conservatively, you will put within about two, three hours, an additional 10 million stem sales in your blood circulation.

So, and you quickly do the math, you know, do this, for example, twice a day for five days. And you've released a hundred million of your own stem cells.

When you compare that with the cost of an injection of a 100 million stem stem sales. and we have not completed the studies now to compare these two approaches, but it becomes significant and.

You don't stop at five. Days. you can do. This for three months, which is going to mean 600 million STEM cells in circulation, if not more. actually a billion, more than a million stem cells that you release by taking two capsules twice a day for a few months.

So cumulatively, it gets quite significant. And what we're doing right now to prove the impact of this, because we say, okay, we release stem sales, what does it really mean?

So we have chosen models, and they're not models. They're inhumans, so they are real, but let's say health conditions or health issues that are known to not really recover, not to really heal and repair in the human experience.

So you talk about, for example, congestive heart failure. If you have congested heart failures, you can do things to help the condition, beta blockers, hypotensive medications, diuretic, those kinds of things.

But this is just to remove the burden on the heart. We're not helping the hard repair. So we have an ongoing study, the preliminary paper of that study was just published a few days ago.

So, we published on the first 10 patients, and on first ten patients with at least two years of chronic stable congestive heart failure, wherever they were after two or more years, we simply put them on stemregen.

And after six months, all 10 have recovered normal heart function. We have now on Parkinson, we are preparing one on COPD, on liver failure. The point is not to say stemregen cures these problems.

It's not the point at all. This is a product that puts more stem cells in circulation and it means that your body is better able to repair itself. And to show the reality of this, let's see what it mean to prepare the heart.

Let's what is means to support the body's ability to repare the brain and the lung and liver and so on. Very fascinating to me because it's a different type of research when it comes to plant-based medicine.

because typically we're going to look at extracts and extract to counter certain symptom whereas stimulating you know the body to to work on specific.

I'm going say regeneration of you right and you've got protocols I saw on your website specifically tailored to One you know kind of stimulating mobilizing you've got kind a multi-tiered approach to how you do this compared to just and this is why i'm bringing this up because i think a lot of people think about plant medicine they think of herbs and supplements and what not this whole takes it to a whole nother level than just one function.

we're looking at regenerative function and i think that the stem cells are stimulating multiple things going on for regeneration not just yeah or something yeah no you you're bringing an absolutely fundamental point that is super simple to express to hear but it take i mean it's hard for this to penetrate modern human minds if i could say because you look at medicine today even to a large extent naturopathic medicine We're looking for a plant or a drug, but a plan that will contain specific compounds or class of compounds that we'll have an effect on a specific marker in the body that is indicative of a certain health status.

Take cholesterol. There are, we want to lower cholesterol, right or wrong. I'm not going to get into that discussion, But let's say you want, you have, an affect on cholesterol and you're looking for a plant that will reduce that marker.

We haven't changed anything to your heart condition. we haven´t change anything. Were just affecting markers. The entire science, medical science that we have today is all aimed at reducing symptoms and we absolutely never ever cure.

Repair, Microcirculation, and Inflammation

You have hypertension, we give you something that would lower your blood pressure but we're not going to take care of what is the cause of that bloodpressure.

And now we have something that shows up suddenly in medicine, and it's function. It has no impact on symptoms. it has not impact markers at all. The only thing it does, it releases the unit repair in your body, your innate ability to repair, It kicks it back into function, the same repair like none of the problems that you have at 50, you had them

when you were 20, because you add way more stem cells in circulation when we were younger.

So now at an older age, we simply put back these stem cells in circulation and let them do what stem cell do, which is repair. And it's hard to sink in because we live in a world where we just do not repair, if you have diabetes and you repair and like you cure your diabetes, the immediate response is that it is either a miracle or you did not really have a diabetes to begin with.

It was a wrong diagnosis. The idea that you could actually cure it does not sink in. And it's like this for a lot of degenerative disease. You have Parkinson's, you can't repair.

you just live with it. If you have spinal cord injury, You live it with. if you've got heart disease, then you live. Whatever you're having, if it is emphysema, the idea is that it can repair is not existent in medicine.

and yet stem cells is changing this world. It's hard to swallow, but it a reality. Yeah, it definitely is because like you said, It does disrupt the whole model of medicine.

And yeah, naturopathic doctors are no different than medical doctors because in a lot of ways, you know, we're waking up that yeah we can't just swap out, instead of Lipitor we are swapping out for red.

red yeast rice, which is basically the same thing minus a couple of different shifts. The patent. Yeah. And maybe a filler. But really, yeah, that's, That's really it.

So we have to think about like, Yeah, we're just band dating a lot. It's been one of my biggest frustrations in practice that, you know, what am I really doing?

Am I Really helping? am i really bringing back restoration of of health. And so when I was, you know, first introduced to to your products and first introduce to, to what you were describing, I like, wow, this is fascinating.

Of course, i was completely confused at the beginning, and I'm glad we cleared that up. But now I am like okay, even cooler, now you have your protocol, You have the daily maintenance, the accelerated repair.

Now, when i look at those two, im going, okay as we're getting older, we are like cars, that's how i kinda explain it to folks. We are needing repair as time goes on so that makes sense you know with daily maintenance but accelerated I'm going okay is this for someone that has perhaps had a diagnosis of congestive heart failure or has had maybe a traumatic brain injury and we know that there's some processes going or Like you said, Parkinson's, because I noticed that in your 2012 article that I read, we had the final quote there and Parkinson.

Give us a little bit of the background between the two products and the accelerating the process. What was your intention when you created that for folks?

Well, when we discovered the first product that puts more stem cells in circulation, I tested it. I had what to me appeared as a great concept, like it looks like stem cell are the repair system and if you put more in the circulation the body should be able to repair better.

So I sent this product to a friend of mine, a naturopathic doctor. was getting a lot of his patients were patients that doctors could not help them and basically they showed up at his door and saying that's it I have this problem my doctor said that there's nothing I there is nothing you can do and then I just shipped him bottles and says give it to these people and just let me tell me what you see and we saw I mean heart People with significant heart problem reversed, significant emphysema reversed.

We have all kinds of cases. So when I saw this, I realized, okay, there's really something there. And that was the start of everything that I've done since then.

Over the years, we have seen conditions touching just about any aspects of human health. I want to be clear, i'm not saying it's going to reverse diseases.

What I'm saying is that when you give back the body its ability to repair, well, it repairs. And if you look at any kind of degenerative problem, Well, It's an organ that is not repaired.

If you lose cells making insulin, that's diabetes. if You lose cell making, I don't know, dopamine in your brain, That's Parkinson's. Every single problem is the loss of a type of cells that your stem cells can actually replace so that was the original concept today we're actually doing studies with these different problems and i'm choosing like the article that you're referring to i did not publish everything that we saw i published the conditions for which medicine normally says there's nothing that We can do like in that article there was a fellow on on a heart transplant list So he's on a heart transplant list because there's no other option.

You don't do a hard transplant if there is another option and within a matter of three months he had normal heart function. So we published those cases to really show it means something if you can put more stem cells in circulation.

And these people were like, he was 65 at the time and in our study now on congestive heart failure, these are like 60 to 67 years old, something like this.

So at all ages, you release your own stem cells, your body can utilize them for repair. So that's the general context. And when you're referring to the other products that we add in the protocol on our website, it's that, we don't always see, like in this paper, I publish the absolutely most outstanding cases.

It's not everybody that see those kinds of results with that kind of speed. You know, the case with Parkinson in six weeks, reversing 15 years of slow evolution.

So it's not all the time that we see it that way. The point is, and let me make a small parenthesis, I'll come back to that after. When I give my lectures, oftentimes I show this absolutely mind-blowing video of, this is the work of the group of Doris Taylor.

She took the heart of a mouse, circulated digestive enzymes on the cardiac muscle so that, after a few hours, the entire heart is digested, it is gone.

All that were left with is connective tissue of heart. And on that connective tissue that still retains the traces that it was a heart, they put stem cells that had been previously extracted from that same animal, bone marrow stem cell from the animal.

And after a week, the have a beating heart in a test tube. Just to show how powerful your own bone-marrow stem-cells can be. So the question to me is not, like often times you hear, are stem sales really working?

It's not. I mean, you just have to read a little bit in the scientific literature to realize how a ludicrous question that is. Stem cells do work. They are powerful.

The question is, what is standing in the way of stem cells doing their regenerative work in a certain case of an individual that did not see results? You get a 100 million stem cell injection and people tell you, I didn't see any benefit.

Stem cells work. What is their survival rate? What was the ability of these stem cells to reach the area that has been chronically affected? what was their level of systemic inflammation to allow stem cell to really identify where they need to go in the body?

some of the biggest obstacles so we develop mobilize which is a product that has natokinase to make the blood more fluid to have better entrainment nitric oxide producers to dilate arterioles so as you bring more flow toward the capillaries now to actually get a better circulation capillary's must be able to expand dilates So you need flexibilities.

We have a series of bioflavonoids, plant extract to increase flexibility of capillaries. And for cells to circulate optimally, you to have good glycocalyx layer.

So we have polysaccharides to help rebuild the glycochalyx. By taking Mobilize, we really give access to the stem cells that we've just released. we give them access an area that may have had compromised microcirculation because of the chronic nature of problem.

And then we have Signal, which is a blend of plant extract that have all been documented in the scientific literature to reduce the synthesis of various inflammatory compounds.

We have COX-2 blockers, 5-logs blocker, blockes of the syntheses of different inflammatory cytokines, bromelain to digest existing inflammatory cytochines.

Protocols for Maintenance vs Accelerated Repair

So you reduce background noise in blood circulation So now stem cells can see where the fire is in the body, and they can go exactly where they need to go.

So these are the two additional products. The protocol is you release stem cell, you open your microcirculation, your reduce the background noise in your body so the stem-cells that you've just released can really find where to put in their body.

And now you get really effective repair. That makes perfect sense. Because yes, we do tend to wonder if someone is going to be eating, say, fast food every day, they're not doing anything else, and then they try stem cell therapy and they are like, it didn't work for me.

Well, yeah, you didn t reduce the background noise. And microcirculation, I would say is probably the number one issue why we have problems in our health in general.

Is it not fascinating to me? I mean, going back to my class of emo dynamics, the whole dynamics of the blood circulation, I've always dumbfounded why still today there is very, very little discussion about micro circulation.

And yet everybody goes, everybody, a lot of people go to do like an entire blood profile. you want to know what's the red blood cells count, white blood cell count hormonal levels like all these markers and yet the question is to are these components actually reaching the cells because the only way for these component to reach the cell you take DHA you all kinds of things NMN is it reaching to cell because to the reach cells the place the way to do this is through your micro circulation through capillaries So if you don't have good capillary circulation because of everything that can affect microcirculation, it's pointless.

The area of your body that is not having good micro circulation is deprived of all the good stuff that you've put in your bloodstream. So when you look at it like this, a product like Mobilize, we designed it for stem cells.

but it's going to have so many more benefits that people will experience. And we hear it, we here this, people are taking mobilize alone or with stem region release and they come back with things that they had completely forgotten, like they've learned to live with, they sleep better, cold feet disappears, all kinds of things linked to just normal circulation.

I'm glad to hear you say that, because I've mentioned that to a couple of folks and they're like, I don't know. You know, maybe it's more of the mitochondria.

And I think if we don' have circulation, it doesn't compare. Correct. With the circulation. I mean, this is a big thing with women in particular, and you know men too, Because we're talking erectile dysfunction, we are talking things of that nature.

Because a lot of women that are listening to my podcast are in perimenopause menopausal. We have this, there's I believe there is lot going on microcirculation wise with what's happening with hot flashes, night sweats.

but also the cold hands and feet that we have even with the impact on the thyroid. And so I'm thinking about

Mobilize along with us and going, you know, hormone therapy would work so much better with this.

Have you seen that? Have worked on any hormone cases in particular or hypothyroidism where the thyroids was shrunk? We have not worked on it in itself.

We've had a lot of cases. we have a lots of reports, a lof of stories. It seems to be very helpful in pre-menopause, during menopausal. it seems too soften a of what people experience.

Its important to also understand that stem cells have receptors for all the main hormones and when you get this dramatic decline in these hormones, suddenly your ability to repair And I'm sure I don't have that experience personally, but I am sure women must be experiencing that when you get into menopause, if you got an injury, you don' repair as like you repaired before.

Well that has to do with the fact that stem cells are not stimulated in the same way. So it's an important moment also to put more stem cell in circulation.

We are about to start studying the thyroid gland because we have seen in a number of cases, even in people that have had their thyroid glands destroyed because of an overactive thyroid.

And then years later, when they start to put more stem cells in circulation, one case, among others, she became a friend, but she started to describe how she was not hungry.

She was jittery. well, and then she realized that she stopped taking her centroid. And then after a while, she realize, you know what? She was making her own T3.

We don't have any data to see where is the thyroid gland, but the only conclusion is that part of the thyroid gland has just been regenerated and now is making its own t3, t4.

The only reason why I've not looked at this specifically, it's because my interest is not to show that it is good for one specific condition. My interest is to show that once you've released your stem cells, your body repairs.

And I'm using as examples of this phenomenon cases for which medicine would say normally these organs and tissue cannot repair. Your brain cannot repair.

Your heart has passed 10 years of age. It's not true, actually. Traditional medicine is telling us that after 10 year of your heart as the number of cells that it will have all its life.

And if you lose any one of them, too bad for you. This is what is probably still thought in medicine today. And we know that it is not true. Your heart renews about a rate of about 1% a year until about 50 years of age.

It's pretty significant. This at 50, at fifty years old, you've renewed about fifty percent of your heart. And it's based on stem cells. So as you put more stem-cells in circulation, you support this whole process of tissue renewal.

We're targeting conditions for which medicine is telling us that the body should not repair, these organs should repair. Just to show the power of your own stem cell.

Thyroid, it is interesting, but thyroid, I mean, is not unheard of that people get better on their own. And so we're trying to focus on those conditions where normally it isn't known to repair on its own, Absolutely.

Absolutely! So I've seen you have some some info on it. So i know that you Have done some things there because a lot of women right now are at a state in their life Where they're told they have to take a bisphosphonate so they Have to protect their bone.

Otherwise, they'll have a fracture and the calcium is not doing anything So this is an intriguing to me to see how bone and muscle would repair using the stem cells very fast Yeah, no, question that stem cells can turn into a steel

blast that can make bones.

This has been clearly documented in the scientific literature. We've had a number of cases over the years of women who came back and reported better bone density.

And it's not just better bones density, quite frankly. I think sometimes it is a little bit of a poor way to quantify health of the bones because there's a lot of collagen in your bones as well.

which makes then your bone flexible. So it's a bigger picture, but it is all driven by the natural ability of the bone to repair itself. We should at some point start, we should do a study on bone health as well, because we've seen a lot of cases.

But definitely stem cells can help rebuild bones. Very cool, very cool. I'm intrigued on my own level and thinking I might do a little end of one study because I did some DNA testing that showed that I was aging quite rapidly in my heart and my muscles, probably because i'm getting towards 50. But at the same time, I am also looking at it going, i work out every day.

i am extremely fit. And so I went, what's happening? And some thinking this repair thing and much like athletes. and I also saw some information on your website in terms of athletes and repair.

since that does seem to be a factor. It is. Yeah, it is, so we're now using the product strongly with athletes, even with professional athletes. And the thought here is very simple.

If you go and you work out hard, you workout hard like intensely. You create micro lesions. Micro lesions, which you will feel as just a little bit of soreness the day after when you go back to the gym, it's not going to prevent you from doing anything.

However, at a microscopic neurological level, It will trigger inhibition of contraction. Like the muscle that has micro lesion will not contract, will be as strong as it can be when it is fully rested and repaired.

Longevity, Testing, and Practical Use

But if you train, train a lot like athletes, then you're constantly training on top of these micro lesions. Now, if your accelerate the repair and the recovery of this micro-lesions, that means as you go back to the gym to workout, you now no longer have this inhibition.

So the same investment in effort, discipline and time. is going to give you greater outcome over time. So that's number one. Number two, when you get an injury down the line, it's almost always where you got a micro injury before that did not repair very well.

It's most of the time where we get in injury. If you can accelerate the repair and take care of these micro lesions, micro injuries, and micro traumas, then you protect yourself against future injury and from a purely physiological, like more basics than this, to understand that muscle cells do not necessarily you don't get new muscle cell you can get you muscle sales but when a muscle grows hypertrophy it's oftentimes your existing muscle that will grow in size and they grow inside because the fusion with stem cells with the muscle so you get a type of stem cell in your muscle called satellite cells There's two types of stem cells in the body that have been known for a long time.

We just did not have the full understanding that are actually stem-cells. And they were oval cells and the liver and satellite cells. In the muscles, we knew about this layer of cells that were replicating.

They were proliferating. That they behaved like stem cell. There are stem sales of your muscle. So whenever you need to grow your muscle, then these cells fuse with the muscle cells and they grow these muscles and that's why your muscles cells have many nuclei.

And then as you release stem cells, stem cell will go and replenish this satellite cell layer in your muscular. So

releasing stem-cells plays a role in supporting hypertrophy, which is the gain that you get in muscle from working out.

Cool. I've noticed, you know, and I know I'm not alone as we get older, that that does decline. And then the other thing of course that declines that I'd be curious on myself too is the brain and the concentration focus, all of that, which, we've got brain games.

We have all these other things out there that can help to apply. You find that much like with the aging brain, in some people call it menopause brain.

and all that different stuff, We can with signaling, firing glial cells, things of nature too. Yes. I mean, stem cells, again, these studies are not, as far as I know, we're not duplicated in humans, but we know that if you count the number of stem sales in people that have developed Alzheimer's and you compare that with healthy people of the same age, you see significantly fewer stem-cells in the people who have develop Alzheimer.

If you use, and this was done, use a rat model with an F model that spontaneously develops Alzheimer's and you measure cognitive function, if you trigger the release of the animal's own stem cells, you can see a very, very significant improvement in cognitive functions compared to the control Alzheimer group.

So there is a link between stem cell and cognitive deficit as quantified with Alzheimer's. That's the data that we have. Can we extend that to other level of just decline in cognitive function?

I don't know but a lot of people have reported it. I mean cognitive functioning and the age-related decline and cognitive functions is related to so many different things.

Stem cell levels, mitochondrial function, menopause. So the change in estrogen plays a critical role in the cognitive So as it declines, of course, you go to that transition as well.

Microplastic is now emerging as having a significant impact on cognitive function and glyphosate or different types of pesticides have been associated with that gut flora.

So a good gut health has been significantly linked to brain function. I remember an article, I was a student at the time, so this is a long time ago, 40 years ago.

I was, and I remember coming across an article that was documenting how a number of individuals were in intensive care unit in a mental institution, psychiatric institution because of some of them being in coma, other beings in like significant bouts of like psychosis.

And then what they tried on them was a daily regiment of 700 billion microorganism probiotics a day. Many of the were returned home within a week. where all their symptoms had disappeared.

So the link between poor intestinal flora, intestino permeability, and a lot of the stuff that are in your intestine that should not be in the blood, getting into your blood and affecting your brain.

I mean, I've talked here about like significant extreme cases. But a lot of people live into this gray zone where there's some level of intestinal permeability and just this sort of brain fog, poor sleep, or poor ability to concentrate.

And it is linked to the gut. So there are a lotta things today that is affecting our cognitive function. I have no doubt. You could probably go into all the other environmental toxicity's mold.

All of it. Which makes me kind of think a little bit because when someone comes to me and is like, I want to try this particular treatment. And I'm hearing you say, and I wanna make sure it gets highlighted here, that you're not saying like take the stem cells, it's gonna be magic and everything's going to be great for you.

What I am hearing say is we've got to look at the underlying stuff too in terms of where's the microbiome. We've

gotta maybe try to clear some of the infections.

Could it should it be, you know, lime? Could be mold, whatever. We've got to kind of clear some of that stuff. And then perhaps adding the stem cells along the way and maybe hit a little bit harder once we we have proof that we've eradicated whatever bug I'm just kind correct.

What I'm saying is that virtually every single condition at some point in its development is associated with damages to a tissue or a group of tissue and organs.

And you just think about it very, very in broad terms. Aterosclerosis, the beginning of hypertension and all of that, is an injury to the arteries that evolves into calcification and stiffness.

Take diabetes. It evolves to a lack of ability of producing insulin. I mean, you can go with any type of age-related problems. They're all caused or associated with the loss of a type of cells.

Microdamages and stem cells and that's what need to sink in. It's your repair system. If you have a cold, you boost your immune system, if you've low testosterone, boost you ability to make testosterone.

You boost the body's ability do its own thing. In the middle of all of this, we suddenly discover the body has a repair system, just like you have an immune system.

You have a Repair System. If you had a heart attack, a bone fracture, stroke, burn to the skin, these are the models that were used to document the phenomenon.

But you can extend that to any damage to, any tissue. The affected tissue will release specific compounds that are very well known. CSF is one of them that will go to bone marrow and will trigger the release of stem cells from the bone marrow.

The day after the number of stem cells will start to increase, it will peak at about 3 to 5 days, which is the time when you have a cut, for example, when the inflammation starts to go away, the pain starts going away and the repair is starting.

That's when repair is starting around the same time. So at the second day, the affected tissue releases compounds that attracts stem cells to that area.

When stem cell come to the tissue, first thing they will do, they suppress inflammation and then they start the repair process. They will start to multiply and transform into cells of that tissue.

It's your natural repair system. Just like when you have a cold, you boost your immune system, all I'm saying is that now that we realize the absolutely ubiquitous role of stem cells in the body.

If something is broken, start by repairing the tissue. But you need also to take care of the cause. Like, what is the process in body that has created this injury to various organs?

If it is an injury, you repair it and it's done. It's an ongoing process. You can repair, it you'll feel better. but you have to find a cause of problem to remove it.

Just repairing it can at least bring some relief. Okay, makes sense. Makes sense, you know, there's so many things I can think about in terms of of going in many directions with us.

And I think for folks, I Think it's at this point, they're probably wondering like, okay, we've got we got stem regen. Oh, how can we you do? Where do we start with it?

How do We differentiate if we need the daily maintenance versus the accelerated repair protocol? Oh how do you recommend folks start getting to work with your product?

What we call the advanced protocol, which is, so we have signal immobilized to reduce the background noise, open microcirculation. What do we called the standard, sorry, the Standard Protocol is to take two capsules a day.

So every day you release 10 million stem cells, what we the Advanced Protocol. This is what do in our clinical trials. When we do a clinical trial, I talked about congestive heart failure.

We're doing one with Parkinson, preparing to do one COPD with liver issues. Not again to show that we're going to cure these problems. To show when you release stem cells, just like in the video where you get the beating heart in a test tube after a week, stem cell can do their job.

So we are just giving the chance of these stem-cells to go and do the job in their body. So we want to make sure that we do it as quickly as possible, as effectively as possibly.

We have determined over the years that if you do two capsules three times a day, it's not an overkill and at the same time it really maximizes the body's ability to do its job of repair.

So that's the advanced protocol. So I would say very simply if you have a problem, if have something and you would like to see what your body, your stem cells can do to repair, give it a month or two or three on the advance protocol to really give a chance to, really see, what you're body can in terms of repair.

If you're simply past 40, 50 years of age, and you you are starting to see that your body is aging, you not repairing as you used to, And you see the start of little problems that if they can continue, they will be big problems, then just do just the standard protocol or just stem regen release, just to put more stem cells in circulation and give back to your, body its ability to repair that it had, let's say 10, 20 years ago.

That's how it is. You can start in your 40s. In your 30s, you can't start to do this, let's say, once or twice a year, because if you think about it, 10 million stem cells every day for a month, that's 300 million of your own stem sales.

If an injection of 100 million is very significant and you'll do the trip to go to Costa Rica or wherever to release your at 300 million, I mean, it's already quite a bit.

So in your 30s, you do that once or twice a year. Your fees, two, three, four times a years. In your 50s do this every other month. And when you cross these 50's, then maybe you start to get and do these every day.

I've done this everyday for the past 25 years, so there's no problem with it and I am healthy, and have no issues. Impressive. Yeah. I mean, I think it's somewhat a choose your own adventure of how much you want to optimize.

Correct. Totally. here. And I can see, you know, for folks who maybe are just trying to prevent some stuff, this is a good place to start. If someone has something more significant, makes sense to use the advanced protocol.

Now, what kind of with docs that you've worked with, say the naturopath that your working with what kinds of checks and balances are our other docs doing just to give folks a little sense of like, okay, we can't see our sem styles, but we didn't tell you feel better.

What are some of the other basic checks? And balances? Would it be will be be looking at lab work? Could we look at HRV monitor, things like that, tech?

What kind of things are docs doing to monitor progress? It's a very interesting question. Let me put that question in context. I'll just take a few minutes.

We use markers because, for example, longevity. Longevity is a nebulous concept. because longevity is what we will experience when we are 100 years old.

If today you do something for your longevity and you get to 90 and not feeling well, you'll say, darn it, it didn't work. You cannot go back and change it.

So from a medical standpoint, from the therapeutic standpoint longevity, is something that is very hard to grasp. Using animal studies, we were able to identify specific markers in the body that are indicative of longevity.

They're not longevity. Whether we will have longevity with these markers, we'll know in 30 to 40 years from now, because this is a new science. What we can say, though, is that you take, for example, DNA methylation, which is right now considered one of the best markers.

While studies have shown that you can age, according to DNA methylation, you an age 10 years overnight on the night of a surgery. Like you've got a surgery today, overnight you age ten years.

So of course, if you have not aged ten year, your body is going through a trauma and the impact of that trauma is DNA-methylation that equates to, in our concept, our biological aging is ten-years.

And now we imagine that the next 40 years or 50 years of our lives, what we measured today is going to stay on for the 40 next years and then is gonna give us 20 years younger that we have today, we will have 20 year down the road at the other end.

And yet this thing can change overnight. I think that somewhere there's a reality to it, I'm not saying they're useless markers. What I am saying is that, We're reaching conclusions to me that are very weak.

That it really means something for longevity. But there's one thing that is clear. You look at all centenarians and super centenerians, they all have one things in common.

They have not developed age-related disease until a few months before they passed. So delaying the onset of these problems is the secret to longevity.

So there's one thing we can say is that if you count the number of stem cells in people who have developed high blood pressure, erectile dysfunction, heart disease, atherosclerosis, liver failure, kidney failure.

COPD, diabetes, emphysema, Parkinson's, arthritis, even migraine. And the list keeps growing. They all have 50% or less. than the number of stem cells that you find in healthy people of the same age.

So if you understand that your entire body is constantly in the process of tissue turnover, you have a new skin every month, a lining of your intestine every 5 days, and you live every 2-3 years, we talked about it, half of a heart every 50 years.

If the body constantly is in process turnover and The cells that are lost are being replaced by stem cells. That means the number of stem cell in your bloodstream is the driver of you keeping the health that you have today for decades to come.

So if we talk about markers of longevity, to me, how many stem-cells you had in you blood is probably the absolute most optimal marker. even if it does not have an effect on DNA methylation or other markers that have been associated with longevity.

So right now we are working on a way to quantify in a cost-effective way, an easy way how many stem cells you have in circulation because right, now it's done with flow cytometry and you cannot easily find a place where you can get that done.

The moment that we can achieve that, I believe it will become the best marker for longevity So we, so practitioners, what I suggest for them to follow, they can follow these different markers.

We have people, I have, people who came to tell me that they've tried everything to reduce their markers and it's only when they start to take stem regen release that it happened for.

I have not seen this in other people necessarily. So I'm not relying on these markers. I am relying of the markers

that is indicating your level of health, not your intellectual level health.

Not markers, that you can say, oh gee, I've great markers I don't necessarily feel that great. And other who don' feel great, and this is people who feel, i've seen both.

i have seen people having markers like, hey I shaved off like 20 years of my age and you look at them and, you don''t want their health Like they don't really necessarily look super healthy.

And you have other people are super-healthy and they say, I don' know why, like your case, but I dont have super markers for longevity. I do not think they mean the meaning that we have imposed upon them.

So check for them but for me it's like look at the markers of your actual health. How's your blood pressure? All the things that are not working good for you in terms of marker of organ function and follow that.

That's where you'll see the benefits. I like it. I liked it, yeah. The more we can note just on ourselves and how we feel, I think is sometimes more effective in this case.

And yeah, if we could get a test on looking at stem cells, that'd be really neat to do. Cause yeah flow cytometry, and hard for us to find somewhere we're going to get someone to that one.

No, I mean, there are many flow cytometers, but most of them are in cancer institute where they count number of stem cells before treatments. Outside of that, you know, they're no clinical institutions that have a flow-cytometer.

There's no use for that. So if you need a test, either have somebody who's like a tech that can run the flow cytometers and can do that on the weekend and he does not get caught.

So that's pretty much your option to get the number of stem cells. And even that, you know, when we do our studies, people come at eight in the morning.

They rest for one hour because stress can affect movement, can can effect your ability to quantify the numbers of cells in circulation. And we do this in triplicates and then we give them a placebo or the plant we want to test and we repeat the process after an hour, two hours and three hours.

So and all I'm saying here is that if you just drive in traffic, go up the clinic in a rush, get your blood sample and count the number of stem cells that you have in your.

That quantification may not be valid, may be representative. It's not an easy parameter to quantify and put validity on. Just look at hormones, it changes every day and every hour.

You know, so it's very tricky to even put a lot of weight in these things. It gives us an idea, but symptoms are always going to be my main, you know thing.

Now, one thing I want to ask before we wrap everything up, peptides are really hot right now. People are doing the expensive stem cell therapies and all of that with peptide.

How have you seen your product to work with the peptid therapy or have even looked at it? Have you thought about it, what's your take? Well, we have a growing number of practitioners using Stem Regen that are doing it in combination with peptides, as well as a number growing of practitioner using peptide and now adding Steme Regens to it because they see that there's a really good synergy between the two.

And it's too early, at least I'm not aware of any research that has linked peptids to stem cells, but I am looking at it from a distance. Stems cells are the repair system of the body.

nothing in your body will repair without stem cells. If you have a dysfunction of a cell and you restore proper function, then okay, I'm not saying stem cell are involved in that process, but if you're talking about having lost a

function where an organ has been damaged, The only thing that will repair is stem cells.

So if you've got something that repairs, it has to be because it as an effect on stem cell. Take PMF, red light, peptides, all of these things that are very good to accelerate tissue repair.

It has be through stem-cells. Red light has an affect on cells, PMS now, the more that PMFS studied, is having a significant effect of stem sales. Migration, proliferation, differentiation.

So peptides, little research has been done, but I would be, I'm virtually convinced that one of the mechanism of action is that it leverage stem cells.

Say if you put more stem in the environment and then you use peptide, you think that you're going to get a really good synergy. Excellent. I think a lot of people will be happy to hear that, too, based on, you know, what they've been dabbling in and things of that nature.

All right. Wow. Such good stuff. Really good question. Let's see if we can put that on our website, because the moment that we talk about a disease, then we cannot put a brand attached to it.

So we're doing the research, but to be clear, I said it many times, our intent is not to say the product is good for that condition. But it's in the Journal of Stem Cell Science and Therapy, It's so bad.

I should remember that June of stem cell. We'll find a way to put it out there. Very lovely, very lovely. I was going to say, you know, the peptide guy, Jean-Francois Tremblay, do you?

I don't know him, but the name is very French. Yes. He does a lot of peptides research. How do we get you two together? Yeah, yeah. However, You're in Montana.

he's I think he is in Montreal. But nevertheless, just something I'm cooking up in my head while we're talking. Absolutely. Such good stuff here, Christian.

Now I am going geek out. even more on this. And it's really inspired me to take a look and really have my patients go, okay, if we can amplify things, this is definitely the way to go.

So keep up the good work on the research. I love it. and I want to keep seeing more good things coming out of there. Yeah, guys, go over to, I've got to make sure I got it right, stemregen, so S-T-E-M-R- E-G-N.

C-O. We'll have all of the details at my podcast notes and drjcarlsend.com. Thank you so much, Christian. Hey fellow health junkie, thanks for listening to the health fix podcast.

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