Introduction to Regenerative Life and Dr. Battiste

Hi, I'm Dr. Scott Stoll and welcome to a regenerative life podcast where science becomes hope, food becomes a catalyst for healing and every conversation explores the profound connections between personal health, human flourishing and the earth and future that we will share together.

But more importantly, we'll explore one of the most important questions of our time. What happens when we actually begin living in alignment with the way we were designed?

Well, good day and welcome back. Thanks for joining Regenerative Life podcast. I'm Dr. Scott Stoll. And again, I just really appreciate you being here and taking this journey with me.

Today I am honored to welcome my dear friend, Dr Columbus Battiste. He is an interventional cardiologist, an author, a speaker, and nationally respected leader in lifestyle medicine.

and his work has helped redefine what it means to heal the heart as you're going to hear today. Columbus and I have shared a very deep commitment through the years that food is not only medicine, it's a pathway to dignity, to access, empowering people, inspiring hope, especially for communities that have been disproportionately burdened by heart disease and all the chronic diseases.

and those communities that have limited access to health promoting resources. We share the same heart. And through our shared work together with the HELP Conference, You can find more about that on helpconference.org.

We have sought to bring regenerative lifestyle solutions to communities that are at risk, demonstrating the power of the plate can reach far beyond the individual to strengthen families, neighborhoods, and whole communities.

And we sincerely believe that the Power of The Plate is one of cornerstones of beginning to actually heal communities, Dr. Patis is an interventional cardiologist.

He has spent years treating the consequences of advanced cardiovascular disease, but his work points to so much more. It's really about the changing and the possibility of an internal environment that drives disease in the first place.

And we're going to talk about that in depth today. I'm going to ask him to explore with us how a plant-based plate prevents, arrests, and often reverses the progression of heart disease, but also how stress, connection, community belonging, meaning shape cardiovascular health and our overall health.

And I really want to talk with Dr. Batiste today about the idea of regeneration. Regenerating the heart, regenerating arteries, generating your life and regenerate communities.

So Columbus, thanks for joining me, my dear friend. I am absolutely delighted you're here today. Thank you. Oh, it's a pleasure. It's always good to connect, especially about an important topic like lifestyle, heart health, and some of the other factors that we'll talk about today.

Yeah, thank you, Columbus. And before we dive into all of that, you know, I love stories. I know part of your story, but I want to get into a little more of you story.

So can you maybe take us back to where you grew up? What shaped you in that environment? Because you grow up in a community that was challenged under race stories, what was it that helped you to pursue an inspired vision for your life to become a physician of interventional cardiologists?

And what were the resources around you that supported you in a meaningful way? Yeah, no, thanks for that. I think it's, you know, Scott, I thing it is so important for us always to reflect on our history.

History is such an vitally important part of who we are as individuals and as a community. And when I reflect back, my story actually began before I was born.

My parents, they lived in Compton, California. and I always say a fun fact, who's probably one of the most famous individuals from Comton, Calif. In many instances, it isn't who you think.

So a lot of people will talk about musicians and rappers, things of that nature, but probably the most famous individual to arise out of Compton, California were the Bush family, President Bush and his family.

Growing Up in Compton and a Family Rooted in Health

Yeah. They were amongst the first that we can reflect on. So growing up there, my dad always dibbled and dabbled into nutrition and health. And it's so interesting in terms of his story, he started a health food store.

called Nature's Garden. And out of that store, my mom would juice the carrots and they were a two-person operation as many couples are. Then I was a pleasant surprise that came around after my brother's 16 years older than I am and my siblings.

So being the pleasant surprised, that surprise impacted my moms ability to work in the store and it led to that story closing before I born. But growing up, I grew up in a family that was very nurturing and very aspiring.

They were aspirational. And my dad would oftentimes say, listen, are you going to be a doctor? You're going be lawyer or a business person. He instilled in us that you were going do something of value.

And he said that with his words and he demonstrated with this actions. It doesn't stop there because he was involved in community work. He was involved in terms of mentoring individuals.

He has such a giving spirit. I'll never forget he would give the shirt off his back and was quick to help someone in need at any point in time. And so that's the environment that I grew up in.

This mixture of aspiration towards achieving through education tied to community service. And those were the things that were said to me spoken and unspoken throughout the course of my life.

As a matter of fact, my mom actually taught cooking classes. She would make gluten from scratch and teach folks about eating healthfully and so forth, along with the juicing and supplements and all those things.

They were involved in so many different things, And so that was the background that I can't say as a teenager that. I was all into that stuff. That I have this halo over my, my head.

And I will say, yeah, let's get into all this. Absolutely was not. 16 is not cool. No, not even a little bit. So, you know, we went down and I had natural affinity towards.

becoming a physician and like many youth, I was into sports and wanted to become the Lakers team doctor growing up in Compton, California. Yeah, that was my aspiration was to be Laker's team, doctor until I hit college and I encountered cardiac physiology.

I went and spent time at the University of Virginia with a cardiologist and I fell in love with the heart. And we've been in Love ever since. So that was somewhat the journey there.

What's interesting is When I entered into practice after being fortunate enough to go through internal medicine, cardiology, interventional cardiologist, and came out, I was strong into procedures.

And I said, the only way for us to stamp out cardiovascular disease is for to be able to do procedures and give people the therapy that they needed. I like was staunched on this.

Full circle, years later. There was a doctor who said, oh, I remember Columbus. Yeah, he was really into procedures. And my colleague said he's not really like that anymore.

But, you know, life has its way of twists and turns. He also would had dibble and dabble. The world would say that he was very healthy. They would said he didn't eat much meat.

His doctors told him to start eating meat because of his disease, which was quite an interesting statement on the behalf of its physicians. He would have some sweets and have soda.

Didn't drink alcohol, didn''t smoke. And anyone on outside looking in would that that was moderate. But for him, that moderation killed. That moderation flamed the fires of disease, of diabetes, and eventually his course led to I grew up with my dad having diabetes constantly.

I was a staple in our home of recognizing that. So after being done, I thought, well, here I am, cardiologist. My dad did all this stuff for me. You know, my Dad loved to get dressed up in suits and his shoes, but he had peripheral neuropathy.

He had foot drop. And so he had to wear braces. He couldn't find braces that fit his fancy dressy shoes. So his son, the interventional cardiologist, I found a place that custom made shoes just like he loved them.

And he was like a kid in a candy store. My dad had the ability to make anyone feel that they were special. He had the ability to make you feel as if it didn't matter if you gave him a pencil, that this was the greatest gift he'd ever received.

And so I remember him just being so ecstatic over these shoes, and he put them on, his suit, at that point he had a little walker or whatever else that he didn' like to use.

He has the braces, they fit in there nicely, And he wore them consistently when we'd go to church and other places, in that brace, eventually led to a foot ulcer.

and that foot Ulcer that didn''t detect then led to him having a progression of events to being bed bound and then him subsequently passing away. And I'll tell you, that was one of the most challenging times of my life.

Intermingled with sense of guilt that somehow I had caused this, somehow intermingle with an idea that why didn't I recognize the process early on? Why didn't, as I learned about nutrition later on after his passing, why couldn't I have learned that earlier?

That maybe I could have given him the encouragement of the seeds that he already had planted, knowledge of nutrition, but really pointing him in the direction that could've been transformative with his life that would've allowed him to be around longer.

And so that was the breaking point for me. That was a change in time was after my dad passed that I looked back at what I was doing of pills and procedures and testing and this turnstile of over and over patients coming through of having to break this chain.

And I knew that it was an issue as I read more and more, and we're in an amazing period of time right now. So even before AI, we're in an amazing period in time of just knowledge and accessibility to the research and science is so profound.

That wasn't the case when I started. So one or two books, Esselstyn's book, Ornish's books and kind of going through in the detail, even kind going back to Pritikin and looking through and trying to look through their references and pool data and then going to PubMed and seeing what I could figure out.

as opposed to now having just a plethora of data and availability of science. And so I recognized the power of lifestyle. I recognize the powerful of nutrition, specifically as a therapeutic modality.

It came to a point that I said, I have to share this impendence for what I didn't do for my dad, in his memory, and his spirit, what his physicians were knowledgeable to have told him about.

And so I was guarded, if I'm honest, Scott. You know, if you haven't noticed, I have a little tan on me, you know? And so, there's not a whole lot of interventional cardiologists across the world that have the tan that I had.

And, so I was a lil' nervous that, man, don't wanna be that guy and say something a li'l odd.

From Procedures to Lifestyle Medicine

So, was very, very nervous. I'll never forget the very first three patients I told, started telling them, and I didn't even have an elevator pitch. Didn't have like a nice presentations or anything.

Actually told them okay, just need you to eat eat better, and I wrote a few things down. I gave them the books I had read. Gave them a book by Joel Furman, gave him a books by Ornish and by Esselstyn.

And each of those individuals made the changes, even though I didn't have the words, I did not have stories, the science fully vetted in my mind. They made changes and they had transformations in their outcome.

Even the doc who hired me was like, All right, Columbus, I sent you this patient for a stint and you talked to him about this. They're doing better. I'm not sure what you told him, but keep doing it.

And that's what's jumpstarted. Last I'll tell you, this is the power of mentoring. This is a power words. Never forget that after doing those things, someone inside of my medical center, my group, they became aware.

At that point, I was chief of cardiology, that I doing this. And they mentioned it to Hans Dill. They mentioned to Caldwell Esselstyn. All of a sudden I'm getting a call from Caledwell Esselson on the phone that was like, as a fanboy in that moment, like nah, this isn't, about to hang up, you know?

And he was just so kind and said, whatever you need, whatever I can do to help you, you have a tremendous opportunity and the impact that you can make in this world.

Same with Hans Deal did the exact same thing. And I'll tell you those words were so incredibly encouraging to me and they ignited the purpose that was already kindling inside of me to move forward and it spurred it on and haven't looked back since.

That was a lot. No, it's a beautiful story. Thank you. I learned things that I didn't know before. So thank you for sharing all of that. Just want to take a moment, Columbus, and I really want just to honor your father.

He was great man. And when we think about success across the board, from life success to healing success or regeneration, It all occurs within an environment where there's support and resources.

Whether it's, you know, an individual like you growing up in a house, and I know in Compton probably a few houses down, where there wasn't the same environment, people didn't end up going the direction that you did.

And it's, you know, the location is the same, but the environment and the resources are what make the difference. And I just want to honor your father, because what an amazing man to live a life where he inspires his family to think big and continue to thing big, and provided the support and encouragement and opportunity for you to do that, to be where you are today.

I want honor him and take a minute because he was a great man. No, thank you. Thank you, I absolutely think so. And, you know, it meant a lot. I think one of the biggest things is when you look at the sacrifice that comes along

with all those things that he made.

Oftentimes I'll say about my parents is that, they didn't invest in 401ks and mutual funds and stocks and bonds. They invested in their kids. They invest in their children with their full-fledged resources.

And one of the things that I think about constantly and I try and do pay honor to him and look at individuals when I'm out in the world and the community and see our senior citizens working still at an advanced age and when they want, I am sure, to do other things because of financial need, my dad was on his hands and knees painting curbs despite being a professor in college and owning a business and doing all these things to make money to send us to private school in College and when I look at that and during that journey of actually looking embarrassed When I was a kid and being embarrassed to be out there with him, you know, I looked back and I think man I Was something else and then ungrateful person and it's like I have a responsibility to give to people.

I've a responsible to do despite how I feel. A responsibility, to look bigger than just what am I getting out of this? It's not about what I'm getting at.

It should not be. And so those memories come back full circle continually. We were chatting earlier before we went on live about just challenges and things that we're looking to and to really help individuals.

One of the things I didn't mention is one of drivers with me is Just once again, it's like, man, to those who much is given, much, is required, and I've been given so much.

And amongst all that, I still have my mother at age 91. You know, me, don't live with her. I'm not of this advanced age, living still with my mothers.

She lives with me now at this point in time. But you know I mean, that's a tremendous blessing. Likewise, they are a partnership and she is as incredible as my father.

in terms of what she has done in my life and still she takes better care of me than I take care her at age 91. And so I think we all have a responsibility in whatever avenue that we deliver, we pay dividends on the investment others have put inside of us.

I Think we're just obligated to do that, whatever that realm is. Yeah, I couldn't agree more, Columbus. And I, you know, the one thing I'll take away from your story about your father and it just reinforces I think what we both believe is the power of words spoken over somebody with belief.

can change their life. And whether it's us as dads, us, as friends, going out into the world and checking out of the grocery store, or working with a patient.

When we speak with vision, with belief, faith, aspiration for that person, and then we come alongside of them with the support and resources, lots of things are possible that we may not have imagined would be possible.

Yeah, absolutely. Absolutely. Well, thanks for sharing all that, Columbus. That was really inspiring. If nothing else, that's worth the entire podcast.

No, thank you. So, you know, just to pick up on your story then and kind of take us down the road of understanding heart disease. You know you started to begin seeing that putting stents in and using medications was managing disease, but it was not really giving people their life back.

I was shocked to learn from my friend that is a heart surgeon about the idea of a full metal jacket that, you know, somebody gets stents in every artery and that's the full medical jacket and there's nothing left to stent.

And the next thing you have, they're in bypass surgery. Yeah. That was a wake-up call to me. He said, stints don't last that long. This was very early on.

It suddenly made sense to, me that of course they don' t last long because we haven't changed the environment that led to the atherosclerosis in the first place.

But I think would be really helpful for our audience, because it took me years to try and understand this, is to just walk us through the development of heart disease, and then on the back side of this I want to talk about the lifestyle and environmental factors that can help us begin unwinding those processes and allowing the body to suspend and even reverse heart diseases.

And you can go as deep as you want. Like, let's talk about endothelium. Let's talking about oxidative stress and injury and, you know, the formation of plaque.

I think it'd be really helpful to just walk through like the beginning to the end, starting with how we grow up in our communities that shapes the food that we eat, stress that were under and how that begins to, to affect like, biological systems and cells in your body.

Yeah. No, I mean, now you're speaking my language now. You know, you had me at hello, but you speak my languages. This is where we get nerdy. But, when I look at, well, first, just to address the surgeon that you knew, one of the analogies I use oftentimes for my patients about open heart surgery, and this is kind of telling the story, we'll start back at the beginning.

is that when there is, I use the analogy of freeways and highways, which most individuals can have a perspective on. And I always kind of give the example of the interchange, right?

So we know when one highway merges with another highway that's going perpendicular and you have this on ramp and off ramp, and all this congestion. a SIG alert with a semi truck that gets into an accident and that wreckage is extending from one highway to another.

Now the police will then oftentimes they will divert traffic off of that highway onto a road.

How Atherosclerosis Develops

Sometimes that road is a wide road, sometimes it's a small road and it will re divert that traffic and enters back into the highway further downstream beyond the blockage.

That's open heart surgery. All they're doing is they were diverting traffic off, and sometimes that road can be a small dirt road, which means it's inclined to shut down fairly quickly, depending on the traffic.

Sometimes it can a highway still, another paved road. But still because of the trafic can still become clogged. And so we know that it is an imperfect system where the underlying disease process is never removed.

It's never treated. So taking us back in time of how we get to this point, that's the end of the story for many people, right? going back to the beginning, you're not born like that in many instances.

You're born with your beautifully and wonderfully made, and so your vessels are dynamic. They're absorbed, they're active, there alive, that's the beauty of it.

There not these rigid pipes that just exist. And so, your vessel have three layers inside of them. We have the inner layer, we have a middle layer that muscular, the outer layer is somewhat like a fatty tissue, tissue we call the adventitia.

So that inner layers, now that where the magic lies. Because this inner layer contains like the magic. It has like this super, super cells that are inside of it.

This single layer of cells, that have the ability to cause the vessel to constrict or to expand. And it releases a substance that says no. Has the initials NO, nitric oxide.

So what is it saying no to? Well, it's saying, no towards anything penetrating it, Very similar to the way a Teflon pan would appear. A brand new Tefon pan that none of your audiences will use at all.

If nothing penetrates that at al, you can put whatever on it. Nothing does. Until damage starts to occur. When damage starts to occur, now things begin to seep from underneath and that's where the problem lies.

So the single layer is called the endothelium and it's comprised of endoethelial cells, EC or endothermium. That's the component that is there. When we say, well, okay, we're the things that are going to cause damage.

Yes, We know that high blood pressure can cause damaged to this single-layer of cells and the easiest way to think of that If I'm out and I am watering the grass.

When I was a kid, we didn't have a sprinkler system. So I actually have to take a water hose and go out, and water the ground. I remember pouring the hose.

Yeah. It's what we do. We will put our thumb over the nozzle to increase the pressure. Right? And that way it would increase the pressure so that we could push leaves down or whatever we have to or the reach of it.

Well, imagine if I'm watering the grass in the rose bushes. I want a light mess. Imagine if i were to have a fireman's high hose on full strength on the top of the glass.

What's going to happen? it's going to disrupt that top layer from the sheer stress. And that's the same thing that happens with high blood pressure. It's coursing through the vessels, into the organs, and it causes this sheer stressed to occur.

Sheer stress means that the resistance and the force against that single layer that causes them to damage, especially at the points of bifurcation or branching.

When that happens, that damages the endothelium. That's one aspect. The other aspect is cholesterol. Now there's so much misinformation about cholesterol, and people have their opinions about it.

But it's really about what the science says. And so we understand that cholesterol or this fat that's carried around, it is insoluble inside of an aqueous solution.

So in other words, we've seen this, you put oil on water, what's going to happen? It's gonna sit on top. So the body is miraculous in that they create these protein, these bolts that carry the fat content around.

And these are called lipoproteins and you have different size lipo proteins. So, the lipal proteins, that low density or smaller lipol proteins are notorious for causing the initial damage.

When they collide with now this damaged endothelium or by the repetitive nature, they collided with the vessel wall, all of a sudden, some of them will start to slip in that wall that's been damaged, just like that Teflon pan.

And we know that based upon the size of the low-density lipoprotein, which is inherently smaller, That's what is the beginning phase because now then the body goes into overdrive.

The body says there's a foreign invader and the alarm goes off. That foreign invade now that triggers the alarms system and now the inflammation begins to pour in.

And these low-density lipoproteins or this cholesterol undergoes oxidative stress. It transforms with macrophages like Pac-Man, eats them up. They become foam cells or foamy.

And then now all of a sudden, they beat the beginning process of Atherosclerosis and you get these tiny fatty streaks that can begin to happen in the lining underneath.

That continues to grow and grow, and grows silently. So one of the things that we know overall is that People try and differentiate and divide inflammation versus cholesterol.

Without cholesterol, fire doesn't happen. If I don't have wood? The virus can't do anything. It can spread. it can grow. The wood, the kindling, and the substance is the cholesterol that's there.

That's what triggers it. And so whether or not you're looking at low-density lipoprotein, lipo protein A, which is another form that is small and very angry that can kindle this and get this fire going, that really propagates cardiovascular disease.

that why you can see this occur as early as before the age of 10. And so it's quite variable in terms of the exact time, but you see the beginnings of this fatty streak.

Now, depending upon a person's lifestyle, and so you mentioned exposure. It could be exposure from adverse childhood events, right? The ACEs. And that can mean by stress, we'll talk about the stress component there, it could mean from the food.

Because what do we give kids for their very first birthday? A smash cake. What do we give them at each party that every year afterwards? Pizza and burgers and hot dogs and ice cream bars.

Will we gave them when they do well in school? Oh, you get a special treat. Here's extra candy or here's a treat, a donut. what do you give to them? When they're sad.

Oh I'm going to give you a soda, candy, treat what we do give when their angry and upset and you want to keep them quiet? Here, eat on this. All of these layers begin to take hold in some individuals.

And it can build the progression of plaque and disease slowly over time in an asymptomatic fashion. Now, how do I know it's asymptotic? And people oftentimes will come to me and they'll say, Doc, I never had any symptoms.

How did this happen? Well, when I'm doing an angiogram and I am going up, you will feel my access point when entering your skin and entering the artery initially.

Once I'm in the artery, you cannot feel me coursing inside your body. You don't have the sensors there, the receptors for you to sense the disease, excuse me, to since disease or pain receptors.

So it's uncommon. And so this will continue to progress like a pimple, these plaques, this thin, fibrous, fatty streak, almost like pimples starts small and it gets that grows and grows for the pus until all of a sudden it pops.

Well, inside your body, when it's a thin cap, that high blood pressure, the high-blood sugar, all those things can erode that thin-cap and now all of a sudden the contents are exposed like a pimple and it leaks out.

Then your by goes into secondary overdrive and that was trying to clot that area off And that's what leads to a heart attack. When those areas become exposed, your body goes into overdrive and tries to heal it.

And, that healing process, once again, takes hold and overdrives. That's, in general, the process of atherosclerosis. So, you'll have different components.

You have your total cholesterol, which is like the size of your city. Your have low-density lipoprotein. Oftentimes, for your standard blood tests, it's a measured blood.

Excuse me. It is a calculated blood measurement. they're not actually measuring the true low-density lipoprotein. They're calculating it based on the total cholesterol and your HDL, your high- density lipo protein, which historically was thought about being a protective one.

And it is, but not completely. We're measuring, the ones that are active and engaged and healthy. So you can have

dysfunctional HDO that can still propagate in a U-shaped curve and lead to disease.

And so we can measure additionally what is the true component of LDL based on what's called the LDl particle size, as well as the apolipoprotein B. Now let me make all those terms simple.

If I really want to know, my true goal is to find out the number of passengers in the car. That's really what I want know. But I only count the cars, I may be off.

in terms of number of people on the highway. Because now we know you have Waymo, you had those driverless cars. You have people who are driving one person in the car.

you may have packed in a car with five or six. And so apolipoprotein SB helps give you a better perspective on that. We have these other modalities that can really help delineate and get a sense of what is the true risk of exposure to the walls of your vessel.

So that's the process of atherosclerosis that Happen interrupt inside of a heart attack that happens slowly over a period of time its relationship to inflammation and its Relationship overall to the structure of the vasculature Thank you, Columbus.

I have to first say this because I was just laughing to myself. You are the master of medical metaphors. Yes, I love it. That's great. It really helps people to understand what's going on.

And I think that brings it into a much more comprehensible paradigm for all of us to see what is happening down inside of our arteries. This is really happening meal by meal.

week by week, month by month, year by year, and people just, like you said, they just don't know that they're accumulating these plaques. And there's a lot of misinformation out there about cholesterol.

Some of that is from the pharmaceutical industry oversimplifying the concept. the purpose of sales. Some of it is social media, you know, creating misinformation around the idea of cholesterol and lifestyle to promote another kind of diet or lifestyle.

And some of its just confusing for people.

Food, Inflammation, and Oxidative Stress

But, maybe if you can help us understand how the food, the alcohol, and the stress mechanistically are injuring endothelium, driving LDL, and contributing to the growth of those plaques over time.

I think that's helpful for people to see like, oh, I understand how the sugar mechanistically is directly impacting the grow of that atherosclerosis and injurying that vessel even within two to four hours.

Bacon, egg, cheese, McMuffin, what's happening to vessel? Yeah, you know, and that's such a vitally important, as you were kind of saying, I was processing in my mind what's the best way to kind package through a common pathway.

I think one of the most common, the common path we obviously is inflammation and oxidative stress. Those are the two, two lanes that converge together that lead to atherosclerosis.

So let's look at fast food, which is going to be a combination of ultra processed foods. It's going be animal products too as well inside of there. So let's take animal products for a moment here, is that we understand that there can be an increase in terms of oxidative stress through heme iron.

We understand, that can then disrupt the endothelium and spur on. I spoke about how the LDL is not truly as bad until it becomes oxidized. And that oxidation occurs.

Because our body makes LDl. Yeah. I mean, it's one of the things we forget. Like, LDls not all bad. No. It's a molecule that actually is part of, you know, making new cells.

That's right. In that phospholipid bilayer. You know it is a part, not a bad, but in excess. Or when it oxidizes, as you're saying, It becomes detrimental.

Absolutely. And we see that with everything, just taking a slight step backwards. You know, whenever we get out of the normal process, I always tell individuals, so mental health is real in this world.

But all of us experience moments of small amounts of depression or anxiety or of overhappiness or even a little bit of of like repetitive, let me go and check this, but it's when it becomes inhibitory.

It's, when becomes excessive is when overtakes you and leads to a problem. So whatever the disease process is, When it takes over, and whether or not that's inflammation, whether that is LDL, the levels rise.

Now it become oxidized inside the system and that leads the disruption of the endothelium. That's the stuff that disease is made of. And so to your point, you're absolutely right that when we look at the process here, so that oxidation pathway is extremely important mechanistically, both for sugar as well as for animal proteins.

We also see it through the inflammatory process with animal protein in terms of affecting the gut microbiota, which then leads to leaky gut syndrome and releasing and spurring on systemic inflammation.

All of these things that inflammation leads to an issue, and that common pathway is through a system called NF-kappa-B. And NF kappa B can be triggered by stress.

It can triggered be by ultra-processed food, be trigger by sugar, it can trigger be animal protein consumption. What that does is that spurs on the inflammatory process releasing into the body these ill-formed monocytes that will spur on or the substrate really for atherosclerosis to continue to progress.

So that's why it's not just one in isolation, it is multiple pathways. It may not be just the cholesterol content of food, no it may just be the sugar component, but when we look at the inflammatory context, we are looking at saturated fat content context that will decrease your low-density lipoprotein receptors, your body's ability to pull this back in.

I will tell you this, I think the biggest harm in the way to gauge if your food is going to be beneficial or has the potential to harmful for you is gonna be based upon its fiber and antioxidant content.

if it has fiber, if has antioxidants, it's going to be valuable to you. And there is a slew of mechanisms that really kind of demonstrate that. We love those mechanisms, don't we?

Yeah, that's the easiest way, right? I think everything else, its discussion is further expounding upon what we know, but the simple issue is, if it's something that makes you chew and use your muscles of mastication repeatedly, it is generally going to be of value to you for all chronic disease processes and will help stem the progression of atherosclerosis throughout your body from head to toe.

And you mix in that, you know, some of the fruit may not have as much of a strong fiber, but it's rich in antioxidants. It's reach and when you have the skin component, that's where the fiber comes in and the meat of fruit, not the fruits juice, But the food itself can be so so powerful.

That's exactly right. Just for people, again, listening, the NF-kappa-beta you described is a master switch of inflammation. And when that switch gets turned on, it turns on 400 genes in the inflammatory cascade.

Yeah. A lot of pharmaceutical industry companies have looked for ways to turn off NF kappa beta. Not very successfully thus far. No. As you said, we know that not only do antioxidants and polyphenols turn that switch off, but the fiber that's digested by the microbiome and the microbiota, the bacteria, and microbiome produce byproducts, waste products of consuming fiber, which are short-chain fatty acids, butyrate circles back through and

turns off that switch.

I mean, that's two of many ways, just to highlight what you're saying, this wonderful multi-mechanistic solution that comes through plants that we don't typically see elsewhere.

And as you said, and I think, you know, human nature is that, we like to simplify things because it's easier. By nature, humans like efficiency. That's how we're built.

Easy, simple things are efficient and it is easy to tell simple stories. Complex stories are difficult. But when we get to the body, understanding the mechanisms of development of atherosclerosis and the mechanisms of unwinding that, it's vastly complex.

It's elegantly beautiful on the reversal side, and similarly elegately complex on development side. Multiple systems, epigenetic susceptibility, stress.

I mean, so many things play into that. But to simplify it as you're doing, which is so great, If you have to chew it, it's full of fiber. It's got antioxidants.

You're going to be turning on a lot of really positive switches to start unwinding cardiovascular disease. I have just to acknowledge what you just said because that's powerful and this is something.

So for folks out there, I still practice I still do, I'm in the cath lab. I mean, they're at least twice a week and I work on patients. And I had this conversation with a colleague, another interventional colleague not into lifestyle at all, but we were talking about trying to select patients for particular times that are lower risk.

I can't tell, which means that there are so many factors that come into play. Yes, a spade's a Spade. If I say what's the likelihood it may rain inside of Seattle throughout the course of a year, okay, it's probably high.

What's it likelihood is going to be hot and dry inside Palm Springs and Coachella? Likely high, yes. We get that. But the vast majority of the average individuals, we can tell.

Someone that I may predict is gonna have bad disease may have vessels that look beautiful. I have other patients who I guarantee, I'm like, you know, this is gonna look beautiful and it's not.

And so nutrition's a big role. Sometimes it is genetics, sometimes it their stressors that play a role, and so it looking at the individual, but the key is, it like when I was in school, talking about my dad, is like you do the right thing, typically the thing pays off.

If I am studying and I trying to seeking to understand, the chances are I'll do well on my test. If I don't study, chances are I won't do well on my tests.

So same concept, if I'm eating health promoting foods, it's going to be value add to my body. If i'm taking care of my stress, my sleep, and my exercise, all of a sudden chances I'm going to have a healthful beneficial effect because these foods, these chewable foods these fruits and vegetables and whole grains they also turn on the sprinkler system the NRF2 that actually helps stem the tide of all the inflammation so not only are they blocking the inflammatory master switch they're also now turning on this sprinker to cool it off and you have this dual beneficial affect based on what you put in your mouth.

That's power. That's power. That if I can charge a patient and give them a true prescriptive therapeutic intervention, now they're empowered. Now they know that with every meal, I'm adding to my longevity.

I am increasing my odds. And I'll throw one more in there because I can't help it. We're turning on regenerative pathways and longevity pathways. AMP-K, MAP-k, CERT-1, so many different pathways that are beneficial in helping the body begin reversing the impacts of that disease.

I mean, we're only touching on a few. I wonder if I can create the A to Z of all the pathways that are positively impacted by a plant-powered plant. So I started with A, and I worked my way all of the way down to the Z.

All the different biochemical, physiologic pathways, they're positively-impacted. And you start looking at the complexity, you're like, my goodness, there's no supplement, nothing that you could do.

more than the power plant and lifestyle to turn on all the right switches and turn off all of the switches. It is elegantly all inspiring. And when you look at how we're all unique, we are the same 95 plus percent, but all of us may have a different, slightly different receptors, even when your ingesting dietary cholesterol, that some have receptors that are going to help your body get rid of it, while others are not going have the level and they are gonna be impacted more by it.

Which is why you'll get this variation where some people say, oh I eat all the whatever I want and I have no problems whatsoever and others have a few and have huge detriment.

Now the key is none of us are getting that level of genetic testing or down to cellular level. So we look at once again, what makes the most sense, but that variability becomes so important.

But at the same point, the beauty of the variability leads to the misinformation. It leads people thinking, I don't know what to believe, but the reality of it is we're learning more and more about it.

Reversing Disease Through Plant-Powered Living

I love the old adage from Einstein, eagle equals one divided by knowledge. And as you grow in knowledge, I'm in awe. of the power of fruits and vegetables and whole grains, its ability for to sustain longevity to reverse disease, to treat and help make us live that purpose, right?

Give us the ability to live, that then hopefully we seek purpose which then now has this continuum effect that it then feeds into our longevity when we maintain purpose and hope.

Yeah, it's an accelerating loop, isn't it? I want to just kind of, we'll wrap this up because I wanna move on to like stress and communities, but maybe walk us through the steps of reversing disease, arresting and reverses disease.

And I, you know, I wanted you to pick it up from the idea of mediocrity too, because we talked about that earlier. And that's one of the mistakes that is often made on twofold.

One is because of outliers, as you mentioned. We have Uncle Johnny who smoked cigars, drank JD, and ate McDonald's every day and lived to 100. And so we think to ourselves, gosh, if Uncle John did that, it must work for me too.

They end up on Good Morning America, and it creates confusion because we're looking at outliers, which have sometimes, they have outlying antioxidant systems that mitigate those differences or as you mentioned, the cholesterol receptors.

But also for the average person, like when we get to a place where we have disease, being mediocre in your intervention is not enough. And so if you could pick up from that point and then just walk us through the lifestyle that is needed and maybe why that works in arresting and potentially reversing cardiovascular disease.

Absolutely. I mean, starting with me being mediocrity and not really going full-fledged, I'll use an analogy with both in studies, academia, as well as with just patient life.

If I had a conversation with a patient and so she said, well, what if my husband takes this medication every other day instead of every day? I said, really?

I says, so what happens if you drink water every other day instead of every day? Or what if happens you don't poop or pee every and you do it every another day.

I say, things are going to become dysfunctional. If I haven't addressed the underlying condition, what's your goal? It's almost akin to saying, I want to protect my home against robbers, So I'm going lock the door, but I'll leave the windows open.

I'm going to go to work every other day. Nothing, nothing works unless you're fully engaged. And so whether it's weight loss, whether its sports, athletics, any area of life, it is about consistency.

So the same thing goes to, we cannot start off by saying, I want to eat healthfully to transform my lifestyle and then I don't do it daily. We wonder, well, why is it not happening?

And so that mediocrity, it leads to disease, exposes you to the disease. It exposing you, leaves you vulnerable is the key. That's the keys. The vulnerability is going to be based upon your resilience.

Your resilience may be complicated based on your stress. Maybe based your resources, your environment, genetics that build into some of your resiliency, but either way you're exposed.

and it leaves you vulnerable. Now, for those who are under resource and they have poor resilience, as you add to that stress or you to add that vulnerability, your health goes down exponentially.

And that's a key irrespective that all of us have to recognize. We have focus on building up the tools that are going to maintain our health, which means it's based on what is it that we want and where are we willing to do to get what we what and what won't we do.

That's the key importance. Now, when it comes to, and I get this question a lot in practice and in community, is can I reverse disease? Can I can reverse the condition?

And one of the things I tell individuals is that as a cardiologist, my goal is twofold, to help you feel better and help me live longer. That's it. I actually don't care about the plaque in your arteries.

I care those two features. And I dont care what happened historically that's built up these calluses inside your vessels. What I really care is are these calyces unstable because a ballistula will hurt and will lead to you being impaired as I described with my dad.

But a callus, it's huge. It's thick. That's atherosclerotic plaque on the outside of the vessel. The question is, is it leading to symptoms? So when we look at the science behind it, we know that when decrease inflammation, when were aggressive in lowering the cholesterol, our lipid panel, that studies have shown.

I'm going to start first with pharmaceutical interventions in traditional medicine. Studies have showed beyond a shadow of a doubt that it can lead to regression of coronary artery disease.

In other words, reversal of Coronary Artery Disease. So what's so interesting is that when people say reversal is not possible, you can point to a plethora of studies that have demonstrated the same thing as studies in the plant-based realm showing micro-regressions.

Now, here's the key when it comes to delivery of blood flow. I don't need that regression to go from 70% down to 10%. I may only need that to reduce by 5% to have a substantial improvement in blood flow, which means it's an alleviation of symptoms.

Now, as I adopt a healthful dietary practice, and while I'm inspecting what I expect with my labs to ensure that it is having the outcome desired and I don't need anything else, what we then observe is we observe that there can be stabilization of the cap or the healing process over that former blister to stabilize it.

And that keeps you from having a heart attack. The regression leads to an absence of symptoms. So yes, mechanistically, can nutrition lead to this? The answer is yes.

When we're ingesting the fiber And as you eloquently outlined Scott, in terms of the short chain fatty acids, what begins to happen with the butyrate, will begins the happen in term of it causing the bowel acids to be excreted out the body and bowel assets are like detergents.

It's like your, your tide or your laundry detergent that's trying to emulsify and break down all the fats. But it helps the buy get rid of this. You're like, okay, well what's the big deal about that?

Well, the body's going to make more bile acids, but the in order to makes bile acid needs cholesterol. So then the the bodies absorbs the cholesterol out the system, out of the intestines, in the order of making more bowel acids.

And so you continue this process of removing the bowel acid, removing cholesterol, and you're lowering the levels. But it doesn't stop there. The body also has these receptors.

It has like these mitts that are all throughout called low-density lipoprotein receptors, so having these foods, it increases the receptor and their activity to help catch and remove it even more so.

So that's the power of this just to a small degree while at the same time. these leafy greens have dietary nitrates, and these dietary nutrients that then get converted over into nitrites and nitric oxide, that nitrous oxide that helps dilate the vessels and stabilize the endothelium in the lining of the vessel.

And so we see that these pathways begin to happen, whether or not it's from the legumes that give you resistant carbohydrates that feeds the fiber that also lowers your heart rate, decreasing the sheer stress I talked about before in vessels that can cause disruption of the endothelium, that now I enrich the body with antioxidants.

And you know the way that I simplify the concept of free radicals and antioxidants? You know, Scott, you're an incredibly kind and loving person and imagine if someone walked, if you walked into a room with a bunch of strangers and they said something, they'd say, why are you wearing that black shirt?

That's a horrible blackshirt. You shouldn't be wearing a black. Everyone here is wearing the white shirt and all of a sudden you come in happy and joy-filled and this free radical of person comes and steal your joy.

They attack you, now make you unstable that now your, perhaps that smile turns to a frown. Now perhaps someone else comes to you and now you immediately become defensive and you brush them off and begin the process of acting like that.

That's what happens with free radicals. They steal from healthy cells the electron causing them to become unstable and it propagates it. Here's the key.

Antioxidants come in and they sacrifice themselves to stabilize that healthy cell. So imagine now someone walks in, and see that this free radical of a person is coming over to tell you something, they beeline and absorb that on your behalf, keeping you healthy.

That's what antioxidants do for us. The more antioxidants you have, it's like carrying with you bodyguards that are protecting you. from bad things happening.

And that's the power of fruits and vegetables. The more color that you have, the more you're arming your body, your cells with the things that it needs to reverse and fight disease.

That's power. So when we talk about regression, we talked about regressions. I talk can it help you feel better? Studies have demonstrated beyond a shadow of a doubt.

With the adoption of, Dean Ornish demonstrated, irrespective. When we look at the lifestyle heart trial, he showed a

regression of symptoms. The Mount Abu open heart trial showed by aggressive lifestyle with nutrition, you show a regression of symptoms too as well.

Apart from whether or not reversal increased blood flow or a not, a regressions symptoms which is reflective. of that, right? It's reflective of an improvement in blood flow.

When we look at over longitudinally, a therapeutic lifestyle diet, that it's shown that there's a reduction in recurrent heart attacks. Studies have shown, through the adoption of cardiac rehab, which contains a lot of the tenants, of a holistic approach towards exercise, nutrition, albeit a dash diet, showing once again, a reduction in cardiovascular events, or reduction and heart attacks, improvement in symptoms.

And so yes, you can reverse install disease. Yes, can prevent heart attack from happening, but that's not the sole course. So people ask all the time, why did I have a heart atack and I ate so well?

Why'd I have a heart attack and my numbers look good? And because there's a six-letter word that really impacts all of us. I don't care who you are and that's stress.

And that stress feeds that same cascade pathway we talked about already through the NF-kappa B. It feeds it, it triggers it through mental stress. Studies have shown that mental stressed can trigger disruption of your endothelium, impairing that lining of the vessel similar to the food, similar blood pressure, cholesterol.

States have show that if a person has perceived stress at work and at home, their likelihood of increased events is comparable if you had diabetes, high blood-pressure as a major risk factor.

And so this stress is simply demands minus resources. That when we feel we're somehow Under-resourced to meet the demands of life. Under resource in terms of housing.

All these things trigger the stress cascade that then works to the same pathway. And we begin to wonder, well, why this person have it or why these individuals have because the stressed doesn't stop there.

The stress then can also impact our epigenes. Those are the controls on top of our DNA that turn disease on and off that can be still passed on generationally.

And you begin to wonder, well, why is this group more inclined to have X, Y, and Z? But we see it when we look overall that the environment plays a substantial role.

Stress, Trauma, and Cardiovascular Risk

Yes, it is nature. And that we're seeing this combination approach is what leads to it. Heart attacks without standard modifiable cardiovascular risk factors and we're seeing a substantial increase volume in this across the globe literally.

That's a perfect segue into stress. As we make this kind of transition, I just want to highlight two things. One is as we're thinking about reversing disease, as you talked about, first you have to arrest the cause, which is the lifestyle, and looking for stress, Which we are going to dive into.

But almost we really need to shift our mindset from thinking like, what do I need eat to reverse disease? What do I need to eat to optimize and harmonize the systems of my body?

Because when we shift to thinking of optimization and the harmonization of systems, the body naturally knows what to do. You know, as you said, the vessels dilate.

The endothelium protects the lining. It protects against plaque formation. And the body identifies cells that are becoming cancerous. Insulin works well.

I mean, everything works when we think about optimization, harmonization. Even in our space, we get a little bit overly reductionistic thinking about, like you taking a vessel from 70% to 50%, is that enough?

Well, it'll always be enough when we go through a different lens of doing what we need to do, living a life in such a way that we're optimizing and harmonizing the systems of our body.

And the power of the plate is powerful. We all agree with that. but it is also that wild card of stress. And I have a slide actually in my presentation where, you know, as I'm moving from food to stress, it's the Uno wildcard.

Yeah, that's right. Something that is sneaky is something that we don't appreciate, we that don t give enough attention to, and that can live with for a long time because we learn to accommodate stress And sometimes stresses are shoved down inside the subconscious like childhood trauma or the zip code in which we live.

The constant daily stressor that we don't understand the impact of that. So let's, you know, to just kind of make this transition for people scientifically, like you did with food, can you just walk us through again how stress from the experience of stress or past stress hidden down in the subconscious activates those stress systems in our body—I'll let you explain them—and how that begins disrupting all of those core systems of our bodies.

from, you know, blood flow to the microbiome to inflammatory levels just so we can make that linkage to build the bridge from based on the science of what we experience to how it actually creates disease in the body.

Yeah, no, it's powerful, the impact of stress. And obviously we understand there's multiple forms of distress, right? So you have distress and you use stress that play a role.

It's the distress that plays such a substantial role in disease process. The best way for me to analogize what happens from either childhood or current is, so when I was a kid, I watched a movie I probably wasn't supposed to watch.

I'm not probably, wasn' supposed watch it. Tell me what it is. it was called Ben, and so Ben was this movie where these rats, would come and eat all the people all up, and they would have all these animal movies.

And I was a small child, so I became deathly afraid of rodents. Deathly, afraid rodent. I as a kid, I a was small boy, that's excusable then. Well, those same memories of what began to happen when I saw that movie and the fear that took over on me in that moment became embedded in a portion of the brain called the amygdala.

And that amygdala then was connected all throughout, turning on the switch of the stress hormone cascade. Now the rapid stress-hormone cascade, not the slow that's anti-inflammatory and the cortisol and so forth, the sympathetic nervous system, norepinephrine, that causes you ready to fight, to run, flight, or to freeze.

And so that was persistent. Fast forward five years, 10 years 20 years 30 years 40 years. When I see a rodent, those memories that are embedded still come on even though I'm a grown man and I understand that this cannot hurt me and that I will be okay.

I have that memory from that trauma. whether or not it was others' experience, they would call it trauma or it not. It was traumatic to me. And so that engine turns on even in this day and age, even if I'm watching a television show and the stress hormone cascade begins.

immediately inside of me. Now, so what's the impact of the stress hormone cascade? So imagine now we will need stress because what does that stress do?

That stress leads to us being able to take action when we need to, whether or not it's to flee whatever situation or to act in time, but when that's stress becomes chronic.

When it's repeated, when it is daily from your boss, from arguments with your significant other, stressors on the job, stresses with family, all those things are persistent and chronic, unalleviating.

This stress hormone cascade continues to persist. that it's working through that same pathway that churns inflammation. So you think, okay, well, exactly how is it doing this?

Well, studies have shown, and now there's multiple studies that replicate this, this process then works at the level of the bone marrow. And it spurs on those monocytes, the type of immune cells that really are the stuff inflammation is built of.

It spers those on into your vasculature. that now you have this inflammation that's primed with the presence of saturated fat and cholesterol and the others to really propagate disease.

But it doesn't stop there. The stress has been shown to disrupt the lining, that cap that covers this area, leading to disruption, meaning that it can make it more inclined to erupt, lead to a heart attack.

So when we look at this whole conversion of stress and how it plays a role just from that perspective, now that's not to mention what begins to happen inside your gut, right?

We understand the gut-brain interaction and that stress plays this substantial role in your microbiota. And that now all of a sudden it inhibits the growth of some of the healthy bacteria, allowing more spurring on of unhealthy that then leads to gap junctions or to releasing some the toxins in the intestines that spurs on inflammation from another perspective.

So you have this duality of approach that stress plays a role silently, slowly, and for the audience out there, I want you to think of it. If I turn the fire on the stove, yeah, if I turned on raging heat, it's going to burn immediately.

What if I turn it on really, really low and that pile of water is saving me? Eventually over time, that slow undulating fire will evaporate that water and it's going to lead to scalding of the pot and burning whatever substance is inside that.

That's what's happening inside of us by this slow, undulating stress on a repeated basis. But I'll tell you that hope isn't lost as it relates to stress.

There are ways in which we can mitigate that, not just through nutrition, but also through other components of lifestyle. Yeah, before we get to mitigation, because you and I are so passionate about communities that are under-resourced and they are a stress hot point.

It's an epicenter for stress because of the nature of that zip code. Talk to us a little bit about how living in that type of a community, it accentuates or accelerates the formation of disease because that stress impact.

And maybe some of those statistics so people can really walk away and understand how important it is that we reach into those communities with solutions.

Yeah, you know, and I think what's so interesting is that I when we characterize it as the zip code, that's important because the ZIP code is irrespective of race, right?

It's really a financial strata is one of the things. Now we can have augmentation of a stress of unique stressors through race and other aspects, whether or not we're in the Appalachians or whether not were inside of South Central Los Angeles.

areas of pockets where you're under resourced. Now that under resource could mean that there's financial stress that happens, right? Because of an absence of jobs that now as an under-resourcing area that housing is impacted and subsequently as a result now your property taxes are low or non-existent and so your educational system is not as ideal which then furthers the cycle, the vicious cycle towards poor jobs.

And now we look at these areas that are flooded with food swamps on top of food deserts, and so they're filled with fast food, quick serve foods as a primary source of nutrients that, as we spoke about, already flame the fires of

disease.

So now, on the top, you're having areas in cities that are bisected and dissected by highways and freeways, so the noise factor is higher. I'll tell you that growing up in Compton, one of the things there is the Compton Airport.

I'll tell you how glorious Compton was back in the day. It's one of the few cities you can think of in compound and so studies have shown the increased intensity of stress.

It becomes crux of conflict that's there. If you have other adverse interaction with individuals or authorities that then flames the fire of disease and now all of a sudden everyone is hypervigilant.

And when you have this level of hypervigilance on top of all these other layers, now the burden of disease increases exponentially. And so it's not really a surprise of what we see there.

So what's a low-hanging fruit? So whether or not that's an appellation, so stays in a different situation, but the access of resources. that are there.

If I have an access to healthful foods to electricity, there are areas in this country, Scott, that still don't have access. To electricity. There are errors in his country that's still Don't Have access, we talk about the digital divide to Internet.

That there's areas that have where water is impacted. We understand that it's not just a major city like Detroit, but there were other pockets, whether it was reservations, other spots where people are not living in the state.

being of existence right now and so it becomes hard for them to overcome the chronic disease and So their thought is interact with the patient just the other day and we said we were talking to him about changing their lifestyle And he said what are you talking about?

I made it to 60. I won He thought that's the end of the road That that as good as it gets That there is nothing beyond that. And so when you have a mindset of individuals where they're so used to living in an environment of death and disease that they feel that have lived their max life possible by the age of 50 or 60, we have problem.

we have a problem. And so let's talk about the solution. First, let us talk how people even watching today can begin mitigating the effects of stress in their life.

Maybe some of the steps that people need to consider to address deeper underlying stressors. And then let's finish talking about communities and how we can help communities begin healing as well.

Gosh, no, I love it and it's hard. So I'm actually not going to follow. I'll be an opposite guy. A rebel? Yeah, a rebel without a cause. There was a study that was done at Morehouse University and they were looking at underserved or ill-resourced communities where there's a high likelihood of expectation of increased cardiovascular events.

And they were looking to identify, well, where are some of the secret sources as to why people seem to be still thriving despite the circumstances? Why are they still overcoming?

And what they found is a common thread, very similar to what was seen inside Blue Zones and other to epidemiologic studies is they found that living with a sense of purpose seemed to translate over into longevity, that they've found living that with connectedness in their neighborhoods that somehow it seemed some of the most important components towards overcoming disease.

Now, I live in a neighborhood, it's a nice neighborhood but you see no neighbors. Now I'm as much to blame for that as possible, as anyone else. I am in my house, I drive up to my home, pull up in the driveway, in a garage, and I get out in that garage and go in to the house.

May go into the backyard, but I may not out front.

Community, Purpose, and the Power of Connection

So am I being neighborly on a regular basis? Do I have that connection? Now a connection isn't just inside your close circle, it plays such a substantial role by having individuals and that's a reflection of intimacy, which is important as it relates to loneliness.

as a complete stressor that, once again, spurs on that concept. And so these studies, looking at the MEKA study, showed that these areas of individuals, that when they had neighborhood connection, when the had the sense of purpose, they tended to have more vascular elasticity, lower markers of inflammation, less cardiovascular events.

that then they dovetailed with that and saying some degree of neighborhood ownership, that they felt proud of their neighborhood. I'll never forget the very first neighborhood where we bought our first home, and believe it or not, my wife was the one who bought the house, not me, because I didn't have any money, I was in training.

And I remember my dad said, drive through the neighborhood on the weekends, different parts so you can get a sense of what's going on. Yeah, remember seeing someone stop, bend down in the middle of the street, there's no houses right there, pick up a piece of trash.

I remember thinking to myself, this is a neighborhood I want to live in because there is community, there's pride in the neighborhood. There's a sense of ownership inside that neighborhood and there was a collectiveness inside of that neighborhoods.

And so these studies have demonstrated just that. So that becomes extremely important inside neighborhoods at risk is can we create some level of community?

that's there. Now, it doesn't end there with community because now we talk about our food, our nutrition that plays such a significant role that you're looking out for others.

But part of the community, I grew up in Compton, but I had a solid church family. And it was an era where my parents didn't just parent me, But there were others in the church who parented me.

So they saw me doing something. It's like, hey, you are not supposed to do that. You're not suppose to act like that, And you have this community of ownership that when any of us succeed, we all succeed.

That's powerful. So those, I think, are extremely important. And how you go about that, it starts by coming together, starts buying efforts, start by outreaching, and starts through the power of the plate.

Because then when we fill that in with tasty food, flavorful food and resource and allocation, That becomes important. I'll never forget. And then I I have you wrap me back in.

So I stay on topic. But, you know, my grandparents are from my mom's and my dad were from Louisiana and from New Orleans. My grandmother was born in Charity Hospital, but one of the staple foods that were there, beans and rice.

greens. And so they will make them so flavorful. Now I still oftentimes will crave just those very simple foods. I'll joke a lot of times and say, you want to eat like a pauper so you can live like the king, right?

So if you eat that way, that's going to be valuable for you long and short term. So when you start to come together as a community and you started to provide some food that is tasteful, has flavor that can empower and enrich and come to together in the communal nature, there's power behind that.

Yeah, and when we think throughout all of human history, gathering around community meals held communities together. And actually the research shows that it's not the coming together that builds relationships, it is actually eating together that builds the relationship.

And when we do that around a healthy plate, it's like the tide rising to lift all ships, right? And I think that study that we were talking about was from BYU 2015. It was a meta-analysis that found that loneliness is the equivalent of smoking 15 cigarettes a day or six alcoholic beverages, has this tremendous impact, more than the impact of obesity or inactivity.

And we have an epidemic of loneliness today. And for me, one of the solutions has always been like a community meal around a plant powered plate, a potluck.

Going back to pot lux as a solution is, you know, as simple, powerful way for people to start regaining health in every way. And then before I kind of bring it back to you, I just want to again highlight what you said that's so important, that purpose and meaning are essential to human health.

And again, being connected in a community gives us a sense of purpose in meaning, if not only to just help the people around us, you know, show up when somebody needs a move, to bring a meal when someone is sick.

that's purpose, to be a part of healing and community. And purpose can be helping to start a local garden in your area, planting some trees. Amazing study showed that trees planted in the neighborhood reduced HSCRP inflammation, inflammatory markers.

And so there's lots of ways that communities can actively engage in healing, you know, and reducing inflammation by coming together. So thank you for that.

And I want to come back to that as we end, just to talk about what we've done with the help conference. But for individuals watching now, just help us as people watching and myself understand what can we do to mitigate stress in our lives, whether it's, you know, acute stress where the tiger now becomes the boss or some worse family member.

How can we mitigate that stress? And maybe the stress that's often forgotten about today, which is that deep childhood trauma that, you know, we push down and we can certainly live and survive, but it is a chronic source.

It's like a rock in the shoe that it's constantly causing an inflammatory process. So, if you could walk through those two as we wrap up this stress, that would be very helpful.

Absolutely, you know and I'll say I think why I got became so interested in stress is just really kind of taking care of patients and that reflection of that combined with my own with just life in general for all of us including myself and seeing that that was a main driver why many of my patients were come in to see me and a lot of their habits and it moved beyond just behavioral aspect of stress in terms of turning to certain aspects of substances or food or whatever it is but actually a mechanistic And so that led me not to be self-promoting to really kind of write the book as it relates to about being selfish, because these are things that I literally began speaking to my patients about.

And, you know, nutrition became the foundational piece, the keystone. I began to add to that, to different components, and that was finally what led to it.

So when I talk about stress, this is what I practice, is the first S begins with spirituality. That may or may not necessarily be a religious connotation, but we'll talk about that.

But it could just be breath work, because the root word for spirit is spiritus, which means breath in Latin. And so we understand the power of breathing for decreasing the stress level almost immediately.

So we understanding whether that's box breathing or 478 breathing. We understand that there can be a tremendous value, whether it's physiologic sigh, that these things have been shown to mitigate that, to decrease the tone inside the amygdala.

But when we engage in meditation or breath work and focus, that's really about focusing in that moment and coming to peace in a place of reflection where there's prayer meditation.

Studies have shown that you're decreasing the activity in the amygdala and you are strengthening the prefrontal cortex. That's powerful. For your planning, that's powerful for your mindset as you're looking there.

So that one of the quickest, and that is the beginning phase for me. The E, everyone wants to turn to exercise. We were chatting about exercise before we came on air.

But I would challenge and say not physical exercise, but exercising belief. The power of belief, the power the tongue and what you say is so important in terms of your disease and the burden.

And there's plenty of studies that Aliyah Crumb has done tremendous work out of Stanford looking at the. Power of placebo effect and nocebo effect in looking, which is essentially the mindset of believe in this power that it plays with not only with stress, but also with disease manifestation.

Clearly exercise both walking outside sunlight has so much power therapeutic intervention. for counteracting anxiety, depression, stressors, just when you get active through multiple mechanisms, whether we talk about BDNF or whether or not we talked about endorphins, all these variables that are there.

Then we move on towards the L, which is love. is never a noun, it's never static, It is action. That's forgiveness, that's gratitude, That is altruism and recognizing states have shown the decrease in stress that when you're forgiving that means that you are allowing yourself to let go of anger.

And sometimes that anger is against yourself for past missteps of forgiveness. You're not forgiving someone for something that they did that was horrific, but you're allowing yourself to move from that place of focus.

And so studies have shown that decreases the stress. I love these incredible studies that looked at the relationship between increased blood flow when the person engages inside of Forgiveness Training.

We talked about food, which is a central F. the intimacy of relationships in this era of cell phones and turning to TikTok and Instagram and YouTube, although we want you to check out Scott on YouTube and check everything else on there and stay on here.

But we understand that what begins to happen is when we're under stress, we turn to these in isolation instead of engaging with human connection. But sayings have shown that it's a human connection that truly decreases our stress, that these intimacy of relationships and this connectedness from a societal perspective and an individual perspective are so vitally important.

And I'll tell you as a side note, I'm always come away renewed when I talk to you, Scott. Whether or not it's, you know, if it informs like this, but I'll be honest with you.

More so when we're just chatting behind the scenes because I value our friendship and our relationship and I glean value from that and feel renewed. And so the intimacy relationships is so important.

Sleep is a major one too as well, decreasing the stress, allowing for a person to be able to deal with the toils of life become important. And last but not least, the H in selfish, it's humor, joy, smiling, laughter.

The power of that, of what begins to happen, just how you can just from a smile, you could begin to lower your blood pressure by just simply smiling. that by laughing you can trigger and transform the direction of the stress hormone cascade in your system.

Selfish: A Framework for Stress Resilience

And so when you begin to adopt the pillars of being selfish, not you're getting selfish to live a life of purpose. What this does is by being self in this context, it builds your resiliency, allows you to withstand those darts that come and they're all subject to them.

They're all coming for all of us every single day, but now if I built my bank, my savings, and my resiliency, I'm able to withstand that and come out unscathed at the end of the day.

And that's what my prescription towards health is. It's looking holistically, at least starting out with one, in trying to grow on that every day single.

Yeah, that is beautiful. Thank you, Columbus. And for those of you watching, if you want more information about that, or you missed some of those, Dr.

Baptiste has a book. So where can they get that book? Because the book is exactly that. Right. Yeah. Amazon, Barnes and Nobles, go to drbaptiste.com, but you know, it's whatever, get the audible version, just seeking to try and help and give a little insight on physiology and why these simple things add up to an awful lot.

Right. Yeah. And the beautiful thing is all of these are free. You could implement these throughout the course of your day and see radical transformation in your life.

Life becomes vibrant, joyful, fully alive when you begin implementing these things. It's really the secret. The title of the book again for people It's selfish, a cardiologist guides the curious.

It is a beautiful, catchy title. Kind of as we wrap up, just talk to the audience about, we have a shared vision, about your vision for helping communities that are under-resourced, at-risk, struggling to find a pathway to health and wholeness.

Yeah, you know, I think part of my vision is to be present and give the gift of My presence and my attention and organizationally through the nonprofit Healthy Heart Nation and with Plantrition, You know I Think we're both doing that.

We're providing health literacy, which means education doesn't mean a person's illiterate, but really Breaking information down at a level on which it's palatable, that people can absorb it and understand it, and act on it.

And understanding that it is a journey, it a process. We're all at different marks on this journey. It's okay if you're at mark zero, but you are moving towards that 26.2 miles.

So it okay we want to bring each person along. Part of that means bringing resources where people are at and helping to navigate people towards that. So part of what we do out of Healthy Heart Nation is we're trying to reach people in barbershops, in churches, and communities and bring resources of education, of screening for blood pressure and eventually for other testing as much as we can.

That we are trying bring a conference together in combination with you and with Plantrition where we actually looking collectively on how can we One, educate the community in having a lecture, but also, how can we bring individuals together that are being impactful in churches and areas of education and hospital systems and community work that now they're able to cross collaborate?

That now, they are able see, listen, collectively, we're stronger than we are individually. How can move and there's awareness of growing inside that community that we hosted in and hopefully moving towards an improved state.

I know that 80 plus percent of health is attained outside the walls of a hospital and clinic. It's important for people in the community to understand their power.

The importance is understand people to, understand for healthcare professionals to and understand the importance of collaborating with community based organizations and that we're not offset by titles.

it's not about Dr. Batiste, it is about Columbus. I'm a person. I am a man. A father. Brother. Husband. Care. Bleed. Cry. Sad. My goal is to try and help people as best as possible.

That's why I've been in this thing called life. And I have a phase of life where that's where I want the legacy to be. There to some purpose that goes on beyond my time on this world.

that can have a ripple effect and that each life touches another and touches other and hopefully we can continue to create an environment that fosters for hopefully one day my grandkids and great grand kids that they can live and be respected and carry on purpose-filled lives.

Yeah, people helping people. That's right. It's not doctors helping people, just authentically showing up, as you said, and people helping, wherever we can do so.

And thank you, Columbus. This has been a really inspiring conversation in so many ways. Every time we talk, I learn something new from you. And just as you said earlier about being inspired, I leave inspired Hopefield because of our conversations.

You really are a brother from another mother, and I mean that from my heart. And I appreciate it so much, Columbus. Right back at you. So with the person that's watching that maybe is inspired.

Maybe they heard something new that they didn't know was possible, which is disease can be arrested and the body can improved, harmonized, regenerated.

But they're lacking some hope and vision. What would you say to that person to inspire some help in them today and help them to get started on that path forward?

What I would tell you is journey of a thousand miles begins with the first step. But here's the key that I will advise you and I advise myself every single day.

Put pen to paper. If you're drawing out a map and a purpose, a trajectory for your business, you are putting pen to paper and writing that down. Write down what you want.

Believe what it is that you're writing down. And then here's the key for your plan that your writing out that, you start today and you were like, I want to begin this journey.

I wanna start and try and work towards either building relationships. So I wanted to increase my nutrition. I wanna increase. My exercise, playing pen to paper.

The next step is kill the plan. Uh, I want you to go ahead and find out every reason why that plan's going to fail. you're too busy, the bills came up, this kid got sick or whatever it may be, then you need to solve for all those variables.

That's called pre-mortem planning, right? So in medicine, we have autopsies that will dissect and figure out why someone died, but it doesn't help that person.

So what businesses have adopted is something called Pre-Mortum Planning. They try and identify ahead of time, I do the same thing inside of my practice with patients on lifestyle.

But I just call it kill the plan, right? And so in that process, when you do that, now you have something tangible that you see, here's the direction I'm going to take.

Here is the easiest pathway, the least thing that I can do to achieve and move towards this goal. And I am putting a star on the calendar. Every single day I achieve one simple goal and your goal is don't break the trend.

If every day I'm waking up and I am doing mindfulness, put a star. Star, star, and you're going to see after 30 days, a calendar rich in stars because you are a Star and it's possible.

So that's what my recommendation is for you. I believe it is possible, I think you can do it. And I'll tell you I talk

about this stuff and these strategies because I need to do these every And I kid you not, I write this down every morning.

What I'm looking to accomplish, what space I want to create today and how I am going to go about it when I going do it. And if you do that, it can increase the odds of your success.

That's great. Thank you, Columbus. So many highlights of today. I really appreciate the power of the plate. and food is a keystone. And it can heal the biological and physiological systems of the body and the heart.

But really, it's relationships, meaning purpose, community that heals the hearts at the core. I appreciate all of your insights. Thank you. Thanks for being here.

Columbus and thanks to all of you for watching. Please join us again on regenerative life podcast and we're partnering together to make this a better world.

Thanks Columbus. And thanks you all have a great day.