Introduction to Dr. Sabrina Solt

– Well Dr. Sabrina Solt. It's such a pleasure to have you. I'm so excited about this this this subject that we're gonna be talking about because this is like the one of the core in and regenerative medicine.

And we you can't have a regenerative medicine summit without talking about stem cells. – You got it and thank you so much for having me. I'm so happy to be here.

– Thank you. So let's I want to tell the audience a little bit about who you are and and all the experience that you have. Dr. Sabrina Solt is a naturopathic medical doctor located in Scottsdale, Arizona.

She has been practicing regenerative and anti aging medicine since 23rd over the years. She has mastered various treatment modalities such as pro therapy, PRP, atapposed and bone marrow derived stem cells as well as as a birth tissue biologics such as amniotic telegraphed and exercise owns.

She is known for crafting comprehensive and custom tailored treatment plans for her patients which incl things like diet and lifestyle changes nutritional supplements, bioidentical hormones, peptide therapies and of course regenerative injections in her free time.

Dr. Solt enjoys reading, traveling and spending time with her husband and two children. Well let's get into it. So what what are stem cells? I mean what what are they what do they do in the body?

– That's the million dollar question. Right? So stem cells are actually primitive cells and we have a bunch of them in our body. And we actually have different subtypes in our body the ones that were most commonly concerned with in clinical practice happen to be the M.

S. C. S. So the mesenchymal stem cells and these are actually really abundant in a person's own fat tissue. And we live in the United States right where we don't necessarily have a shortage of bank stem cells. So we'll say the other stem cells that we use commonly in clinical practice is the one that people are most commonly familiar with.

And that's actually bone marrow derived stem cells. We've heard about bone marrow being used for decades especially in cancer treatments.

What Stem Cells Are and Where They Come From

And more recently a lot of people have become very attuned to the fact that they can actually bank the stem cell that are located in their Children's umbilical cords.

So that's been another topic of conversation. But ultimately the whole goal of stem cells is to provide healing and regeneration for various tissue types in our bodies and using stem cells in clinical practice. What we can do is we can apply them to areas that require healing and allow them to do their job.

– So okay, so you talked about the mess and Kimmel stem cells talked about the bone marrow derived talked about also from umbilical cord from your your Children.

You know that that's another where you can bank them and then use it for for yourself and for your Children. It sounds like um and so how do they how do they function differently? Is one better than the other is it the fat stem cells better than the bone marrow? Better than the umbilical, which one is better and how do they operate differently?

– Yeah. So this is there's a lot of nuance to this. So if you don't mind, we can definitely dive in here. Stop me. If I need to clarify anything. But let's at least start with what we can do in the United States.

Clinically, I think this is an important benchmark to make because what we can do globally and what the potential is for a lot of these tissue types is way different than what we can actually do in the United States and our practices.

So in the United States we can still do therapeutics that we can use the adipose derived stem cells. We can use bone marrow derived stem cells and we can even use certain umbilical cord products. Now again, this is way different than potentially other other countries where they have different regulations set in place.

Now when it comes to the nuances, as far as what are we going to use these things for? Well, when we're talking about mesenchymal stem cells or the stem cells that we can get from a person's own fat. These are going to potentially eight into different tissue types specific to the measles layer.

Right? So the mesenchymal stem cells are going to perpetua miso layers which are things like your muscle, your nerve, your cartilage, your bone, things like that. So all the stuff that would necessarily be concerned about with our muscular skeletal situations.

Bone marrow for example, is predominantly a hematopoietic stem cell line, not so much mesenchymal stem cells. So there are some there and there are a lot of people who will utilize bone marrow for some musculoskeletal situations as well.

But most commonly what we see bone marrow being used for is say um transplants for people who have something like leukemia, for example. Now the umbilical products, this is really interesting because we have to differentiate between the umbilical products in the context of a person's own banked tissues versus ones that we get from a company that manufactures these products.

Now, if you are presented with the opportunity to actually bank your child's umbilical cord blood, a lot of people have done this and the idea is that you're saving these stem cells for a point in time whereby if somebody, if that child or possibly a first degree relative becomes sick at some point in their life, that they can then use these stem cells to potentially heal whatever it is that might have come up and for some cases this might be a really, really great thing to do in certain other cases.

I don't always necessarily recommend it simply because it can involve a lot of jumping through hoops in order to actually request those doses back to you for use when it comes to the manufactured products in the United States and this is a whole big conversation.

There's various things that companies are currently manufacturing. There's companies that are manufacturing umbilical cord products that are just that are isolated cord blood products that are products that are using the warden's jelly that's present in the umbilical cord. And there's also companies that are processing things like the amniotic fluid or placental matrix, things like that.

So basically using all different birth tissue aspects a lot of the time these companies, because of the processing that they have to do involving cryopreservation, Irradiation. Not every single company is ending up with a product that actually contains real life stem cells by the end a lot of the time these products, they can be very rich in protein structures like growth factors and cytokines because those have the ability to survive those really intense processes.

But we're not often left with a true stem cell product and there in lies the difference between how we select these therapeutics for clinical use because we run into a situation where we do feel like a patient would actually benefit from stem cell therapy.

We might want to lean more towards doing something like their own fat or their own bone because we can actually guarantee live cells and survivability in that same day office procedure versus a manufactured product. Not saying those are bad, but they just might have different indications and understanding the difference between how a stem cell performs versus a protein structure or growth factor product performs is really the key in deciding which one we're going to work with.

– And so one of the issues, I mean, and these are questions that come to me frequently as fatty cells. I mean you have toxins that are stored there.

Comparing Fat, Bone Marrow, and Umbilical Cord Sources

They secrete inflammatory cytokines. Yeah, it's a very inflammatory tissue. So to inject that into somebody, would you get some of those factors in as well in addition to the stem cells or how do you, how do you separate that?

– I think it depends on the processing and I think it also depends on the host. Not every host is going to necessarily be giving off inflammatory cytokines in their adipose tissue. And I think this also has a lot to do with other type of diet that the person is on going into it.

There actually is research that supports that people who are die diabetic, for example, are actually going to produce more inflammatory cytokines in their own adipose tissue and are therefore going to have a very, very poor response more or less to a stem cell treatment overall, whether it's even coming from their own body or a donor tissue.

Now, of course, this is the other part of the conversation, which is maybe not everybody is necessarily a candidate for a stem cell treatment and that you have to be somewhat of a healthy host to be able to donate yourselves back to yourself.

So I think that, again, making sure that you have those kind of qualifications in place to see are you going to be the right candidate for this? Because yes, you're completely right. There is the potential for something like inflammatory cytokines to possibly make an issue worse.

– So one and I'm gonna kind of get back to that a little bit later on, but first I want to kind of create a picture of what is possible with, I mean, obviously there's no no medicine out there that can guarantee that this is what's going to happen. But you can look at the potential of what this type of medicine can offer. What is that?

I mean, what what what can people kind of look towards, you know, stem cell therapy in regard to what they are dealing with themselves. – Yeah, there's a couple of different circumstances that will kind of parse out.

The first one being is that somebody may be there in a situation where they've experienced some sort of injury. What stem cells can do for that is they're going to kind of compressed time, they're going to take your healing that might have taken a year, two years and they're really going to cut that down because we're just adding more of that positive healing juice to that area that's affected, then you have the other type of person that might be coming in, which is your person with your with a chronic disease or something that's been going on for many many years?

Not so much necessarily an acute injury and a lot of the time with those patients, what we're doing with them is we're trying to save them from surgery.

We're trying to get them off medications and we're simply trying to improve their quality of life. We're not necessarily trying to get a full we'll call a cure of whatever might be ailing them if we do great.

But a lot of the time it comes down to realistic management of your condition and what kind of quality of life can we get you using these stem cells that you might not have been able to get on your own because well if you would have you wouldn't be needing your help.

– And so because I know there's a lot of research in regards to like like heart you know there's been where you kind of place stem cells and in the location obviously this is not something we would do in a normal office visit in my clinic or or your clinic but they've been able to kind of regenerate the heart regenerate areas of the heart using stem cell.

So it and then also I know you know these are experiences that I've had myself where you have stage four or stage five actually kidney disease supposed to go on dialysis.

You know we do stem cell i. V. And we do other therapies along with it and and now she's not you know so so these are the kind of things that you know we can see that the regenerative aspect.

So do you use and then also you have people like post line you know they dealt with Lyme disease and obviously even though you clear out all these chronic infections, you still get to regenerate after and so you you're still sick because your body is not able hasn't regenerated even though you don't have the infections or you know Children dealing with like autism or after strokes or after all these different things.

So what are what are some are these some of the things that you deal with as well? I mean or is this something that you see as well in your clinic or or your some of your peers? – Yeah. I've actually treated a number of patients post Lyme who like you said, they've gone through everything to actually clear the infection but the damage that was left behind in the wake of the infections still needed some extra attention stem cells have come in really handy. They're also used them with various autoimmune patients to help them reduce or eliminate flares, reduce or get off of medications.

I've had some patients who've been able to manage their autoimmunities for many years about medications just by utilizing stem cell therapy. We have done it for people post stroke to help get some um some function back and that has worked incredibly well which is amazing because I actually just had a friend close to me um experience a stroke. And we're actually gonna plan to do some regenerative therapies for them. But it's crazy because their hospital experience, they don't do anything for you except monitor you.

There's really nothing. And I'm like wow you're gonna get this hospital bill for probably tens if not hundreds of thousands of dollars to be babysat for a few days and nothing. You know, I don't think we need to get into the traditional medical model to any sort of degree. But it's just crazy because on our side of the river, whatever whatever you wanna call it, we actually have useful tools that can heal people.

And I think this is the most beautiful thing about regenerative medicine and stem cell therapy is that the healing that stem cells provide and what we're able to do in clinical practice in a very easy, efficient and fast way gives people a new lease on life that's not otherwise available or that they haven't even been told about.

It really is a phenomenal piece of medicine. – So tell me some stories of people coming in and obviously stem cell is not the only component of the treatment modalities it it becomes, you know baked in with all these other supportive therapies.

But and so kind of understanding that you can't just and I've had some patients coming here you are dealing with a L. S. And they just want stem cells and try to tell them you know it's not that simple.

Stem Cell Uses for Injury and Chronic Disease

We got to kind of clean up a lot of the heavy metals infections and all these type of things and then we can bring that in or you know and do the nutritional so so with that in mind I mean tell me some stories of things that you you've seen using stem cell therapy with the understanding that obviously there's a lot of adjunct type of therapies that come along with it.

– Yeah totally. And you know I do have to like just additionally set the stage. You're really you're setting it really well in the sense that yes stem cells are, their stem cells are great we can use them to do really incredible things but that they don't take away from the patient having to put in the work to as far you gotta get sleeping we have to get you moving as much as you can.

We have to get your diet cleaned up. We have to again look for the underlying stuff. The underlying imbalances too. And we definitely do that as part of our protocols but some cool stories um Gosh we've gotten people out of wheelchairs who are wheelchair bound for various different types of disease processes.

Like I said people with autoimmune disorders recently we just had a patient with rheumatoid arthritis who was going to be set up to have bilateral hip replacements and knee replacement done totally. Got those away.

We had an M. S. Patient with hyperhidrosis, hyperhidrosis completely went away. M. S. Flares went away phenomenal stuff. Patients with arachnoiditis, I'm not sure if you're familiar with with that disease processes. Getting them off of medication, getting them out of wheelchairs, getting them back, urinary function, stool function, sexual function, reducing pain especially that nerve pain oh my gosh I can go on. I've gotten patients who have had um gosh multiple different autoimmune disorders show grants for example had a patient who was able to completely stop from medications after doing stem cell therapy.

And then of course it's just you have just the garden variety stuff to rotator cuff tears, Meniscus tears, labral tears, all that stuff can all be helped with stem cells as well.

– So when you make the decision that you know let's say, you know, they get in the hip or knee or wherever it is when you make the decision that you do prp which is when you you pull the person's blood and you spin it, you collect the platelets and that has a lot of growth factors and to do that versus stem cells.

I mean what what is the decision making for you. – It comes down to a couple of things, one being the age of the host, the overall health of the host and the severity of the of the issue that we're treating.

So if I have somebody in their early 50s, maybe they're really they're really in great shape overall and they just have like a mild osteoarthritis in their knee.

They're probably going to be a great candidate for prp they just may need more than one treatment, possibly to very rarely three. Somebody who might be a better candidate for something like stem cells, Maybe they're in their sixties, not the best health and they're really more of a moderate to severe arthritis at that point, we're going to really want to bring in the stem cells.

Those are the heavy hitters and they're going to really, really work hard to get that cartilage regenerated. – And what do you do, because obviously stem cells are only as active or they can only be as active as the environment allows them to be. So what do you do then in preparation? So people can kind of understand, you know, what, what does that joint or that person, how do they need to prepare?

– Yeah, I actually, it's funny you mention that. So, I think you saw my bio, I've been doing this for almost 10 years, not as long as you. I think you I saw you you've been in practice for over 30 years, but over that time I've kind of figured out all of the things that I actually want my patients to have in place to make the treatment as most of the possible success as we can get right. Like these are the things that we have to cover.

So I actually created a whole whole online learning plan form that my patients then getting rolled into where we first we teach them mindset stuff. Because, you know, I'm sure if you're familiar with Dr. Bruce Lipton on the biology of belief and your listeners might be too, it's that every single cell in our body is listening to every single thought that we have. So if we're constantly thinking that we're in pain, were injured, we're never going to get better.

Our bodies don't listen to us. So sometimes we have to actually just simply retrain how we think about healing and what is actually posse for our bodies to allow that to open up for us, especially a lot of people coming to us from the traditional medical model, they're just not, they're used to maybe taking a pill to suppress symptoms.

Then once the pills up in our bodies, it just goes away, we really just have to kind of retrain that. So we take them through a whole session on just that and, you know, re creating a new story about what it looks like for them to heal.

We also teach them about sleeping. So, just because we all sleep every night doesn't mean that we know how to do it, or that we're actually doing it well.

So we take the guesswork out of knowing that if you're gonna go to bed tonight, you're gonna go to bed in a state that's actually going to optimize your body for healing because that's when healing actually occurs.

And then of course actually teach them some stem cell science in there too. So we actually really break down in a

really nice easy way how the stem cells are going to work in your body, what it looks and feels like to go through a healing cycle.

What are the things that you're going to expect and how to really support yourself as you're going through that? And then finally we dive into diet changes and the way of eating that I kind of suggest for my patients is a little different than I think a lot of people traditionally recommend, especially when I'm talking to my patients about healing joints or patients autoimmune disorders.

Patient Stories and Treatment Outcomes

I actually get them to go on more of an animal based or a car in a war based diet to really kind of eliminate any possible additional sources of information coming into their body while simultaneously providing their body with the protein, the healthy fats that are actually needed to rebuild all the structures that we're gonna be treating. – So are you concerned with like vegetables having oxalate and and different things that can, that can be inflammatory in that way and just want to make sure you provide the structural component, which is, you know, the meat and the fat.

– Yes, that's exactly it. And patients generally have reported and on average before they even get into my office after they've done these modules with the diet changes 20-30% reduction in their pain just from everything that we teach before they come in, which is pretty significant if you think about it.

So I and most of time people find it easy to provide handouts recommendations. We even have coaching calls that they can set up if they need support, we really make it so that it's easy to get this win.

– So now they've done all that preparation, they get the stem cells. So what do they, you talked before about kind of like the soup, you know that's there. Tell me a little bit about that soup.

You know what, because you have obviously the stem cell, but then there's a bunch of other stuff that comes along with it. – Yes. So when we're talking about actually healing a person, I kind of like to make it sound like this is going to be a new construction site and we were building a home here and I kind of like to kin the stem cells to like the foreman of the construction site who have control over it and they are responsible for making everything happen, making the magic happen. And when you have a foreman on a site, what the foreman can do is the foreman can bring in additional workers and the foreman can bring in additional supplies.

So if we're going through say healing cycle for example, every healing cycle starts with a bit of controlled inflammation that can last roughly 3 to 7 days.

It's normal for things to hurt during this time. We usually don't call our patients because we know they're going to be a little bit mad because everything hurts.

And we just kind of wait and let that process pass. And then we get into the second phase of healing which is our proliferation phase. This is really the phase where all the scaffold starts to go up and all of the supplies come in.

So we're bringing more nutrients to the area. We're enhancing blood flow to the area. There's gonna be certain growth factors that are coming in that are that's going to bring in the ability to make more blood flow happen. So this is like the big drop of the supplies.

Right? And then we can also even have some workers coming in some very specific type of workers, these are like the X. ISMs right. These workers are coming in, they have Specific job to do and then they're out so they're fast and they're potent and they're working really, really well. And this is all kind of in that proliferation phase and then we get into the remodeling phase and this is where the actual construction starts to happen. And this starts at about the six week mark and goes a minimum of 12 weeks. But we actually commonly see even in the research and clinical practice that regeneration can take anywhere from 6 to 12 months so we can get continued healing.

– So all of this is happening just from the one injection and then each you know and and the body just goes through

all these spaces. So when do you feel kind of like that the peak performance?

Like people are saying well I'm not feeling it yet. I mean when do you feel that they kind of that the peak of the healing has taken place and it should what the stem cells are supposed to do?

They should have done by that time. – I think that there's like this almost slow sometimes rapid climb up until about the 12 week mark and then things will kind of level off until they hit about six months and then usually by about six months we see where we got them at that point we might want to decide, okay didn't get 80% of the way better. Are you happy there or maybe you're only 40 or 50% of the way better. Should we consider another treatment. – And are there than people that are not candidates for this?

I mean this is something that we, yeah because this sounds I mean everybody wants themselves, everybody wants to feel younger. Everybody wants to regeneration.

Yes, there's a cost associated with it and it's not cheap but for what is, I mean, in my mind, quality of life and to be able to be out there biking, I mean, how how much is that worth versus sitting in pain?

You know, and the whole body is shutting down because you're not moving well, you know? So, what, how much is that worth to you? But are there people out there that you say that maybe this is not for you?

– Yeah, I have a few qualifications, if you will. First one being, I don't treat anyone who has active cancer currently with mesenchymal stem cells, just because there is this theoretical possibility that some of the growth factors that the stem cells can release will actually increase blood flow to tumors, thereby increasing tumor growth. And of course, there's no ethics committee in the world that would allow you to actually test that theory.

So just to make sure we're being as safe as possible for all parties involved, we just don't accept any cancer patients. We also don't accept smokers simply put smokers, cigarette smokers do not heal as well and your kills your stem cells.

So it's gonna kind of be a waste on both our parts. And then there's a couple kind of soft qualification levels. If a person has taken any steroid medications within the last anywhere from two weeks to six weeks, depending on which one they taken simply because what steroids are going to do is they're going to suppress that initial inflammatory response that the stem cells need to have. Now, once we've gotten you off the steroids and you've been clean for a little bit. Absolutely, we can definitely do them at that point pending. You know, read all our other qualifications. Second thing to that is actually and said.

So non steroidal anti inflammatory drugs like Advil leave ibuprofen, we usually need people to be off of those for at least a week, depending on which one they've taken.

Another consideration is uncontrolled diabetes. Um, there, like I was saying earlier, there there is research that supports that uncontrolled diabetes really does make the state of the body more inflammatory and detrimental to stem cells.

It just doesn't behave well. And then of course within there are a few other nuances like chronic alcohol use, for example, or other recreational drug use.

We certainly don't want any of that because it might be like taking two steps forward and one step back. But those are my general qualifications. – And is there a danger to do stem cells? I mean, you talked about in regard to cancer? I mean, are there other contraindications that you uh that people need to be concerned about or is it completely safe?

PRP vs Stem Cells and Treatment Selection

– For the most part, cancer is gonna be the biggest thing that we're going to be concerned with for most people receiving their own stem cells back to them is gonna come with very little risk. There's not gonna be any risk of

anything like rejection or transmission of an infection or a disease process or anything like that.

And depending on what we're actually treating like if it's a knee or a hip for example, arguably one of the safer things that you can do. – Yeah. Because it's from the person themselves.

So it's not like you're getting something else that you already don't have, right? – Yeah. – And so with these so you talked a little bit about like exercise owns? Yeah. There there are treatments where you can do X zones by themselves, you know, as a injection. So the stem cells when you do stem cell therapy, do you kind of get excess um components already?

Or should you do exorcisms? In addition to, I mean, is that a benefit? – Yeah. Well, the answer to that is actually both. So one of the things that we actually learned about stem cells, especially in regards to neurological issues. So previously in the stem cell community we used to think that if you were treating a neurological disorder or brain disorder, central nervous system issue that you'd actually have to pre load the patient with a substance called mannitol, which would actually drop the blood brain barrier, which is very dangerous and allow the stem cells to actually go in and hit the central nervous system or hit the brain. Well, research that I actually learned about back in 2020 states that you no longer you shouldn't have to do that because what the stem cells will do is they'll kind of go right up to the blood brain barrier.

Use their ability to home in and pick up on inflammatory cytokines and inflammatory signaling and they'll actually secrete their exit zones across the blood brain barrier because exams are small enough to cross in order to exert their effects.

So yes, you definitely do get excess as part of the messengers when you're working with stem cells. But there are companies that actually do manufacture exosomes all on their own and you can use those as a stand alone treatment for many things. And like I was saying earlier there, like those really hard workers that come into a home environment, they have a job to do. They're going to go in, they're going to do the job hard and then they're going to leave.

So they don't quite have the staying power that the stem cells do or the ability to do really more than one thing. But they are really strong and potent at one time. – So, one of the things with stem cells is that, you know, do you know, phrases as a question. So stem cells do.

They behave different in different environments, meaning, you know, like if the heart it has certain needs and then and the joint would have certain needs, the brain would have certain needs and they are all different and they need different type of healings. So do all stem cells and just do the same thing wherever they go or does it depend on the environment that they go into?

– Oh yeah, this is such a great question and such a really fun like nuance to parse out. So when we hear mesenchymal stem cell or MSC. So the term MSC was actually coined by this gentleman named Dr. Arnold Caplan, we actually call him like the grandfather of the MSC, if you look him up on google, he literally holds the patent to the MSC, which is crazy.

Preparing the Body for Stem Cell Therapy

He wrote a position paper, I want to say it was back in 2016-2018, something like that where he actually put forward that we should rename MSC in regards to what it does in the body to medicinal signaling cell instead of mesenchymal stem cell. Because the way that it behaves in the body versus the way that it behaves in a Petri dish are completely diff.

So an MSC in a Petri dish will literally turn into bone or turn into muscle or turn into cartilage. Whereas in the body it actually doesn't do that. What it does is it signals, it tells people what to do.

So again, like the foreman at the construction site, it's surveys and it knows what needs to be done and it signals another thing that I can actually do in the body is it does mitochondrial donation. So we know mitochondria to be

the powerhouse of the cell? The thing that's responsible for generating energy? Well, when the stem cells are going into the body, if they detect a cell that might be in a zombie like state or dying, they'll actually donate their mitochondria to it.

So it can survive. And this includes cells of all different types. So the heart, for example, is actually the highest density of mitochondria in the male body. It's second in the female body, next to the ovaries, but the stem cells will actually donate their mitochondria in that situation versus turning into, say, a heart muscle cell, which is really, really neat. Another thing that stem cells can do is they have the ability to self replicate. So if they get into the body and realize, wow, there's more work that needs to be done, then the number of us that are here, they will actually just go ahead and self replicate so they can get more signaling done throughout the body. That's just a few examples.

And of course the whole field is still really learning. You know, this stuff is new, even though it's been around for a couple of decades, but in the medical field that's that's new. So we're still learning all the different ways that stem cells are able to actually function in the body.

– What are some challenges in regards to this, this field of medicine? I mean, I mean, because you talked a little bit earlier about, you know, what you're able to do in one country versus another country.

I mean, are these the type of things that are inhibiting the progress of this type of medicine, do you feel? – I believe it is because, you know, in the United States for a while, the FDA, which is the Food and Drug Administration, they were trying to say that if a physician was taking stem cells from a patient's own body and then giving them back to the patient, that now the doctor was creating a drug and therefore this drug should be sold back to the patient through the pharmaceutical industries for about half a million dollars.

Anybody with a pulse or, you know, any level of understanding of those people know that that's just their way of trying to get a money grab in an industry that they have no control over because it's technically a same day surgical procedure.

And thankfully, you know, there was a group out of California that just had a very positive ruling where a judge understood this logic. Finally. So I think this is gonna be a really nice turning point for the whole industry where perhaps we'll be, we'll be able to actually get some research back in the United States to really move these therapies ahead and really get that hard data to back up what a lot of us providers are simply seeing clinically. – And what are some of the things that you're seeing that, you know, this would be the next frontier in regard to stem cell therapy?

I mean, we worked on in regards to talking about stroke autoimmune, talking about, yeah, joins, you know, all these kind of tissue regeneration. What are some of the frontiers of that you think is going to be kind of the next thing that we're going to recognize and where stem cells becomes really important?

– That is such a good question. I think it's honestly limitless at this point, I think it's gonna come down to imagination what we're gonna be able to utilize stem cells for and I kind of speak from my own perspective in that in the sense that I've had some really wonky things walk into my office as I'm sure you've had some situations where you're the person's last hope they've been to ever doctor, they've been to 17 mayo clinics, whatever like they've seen everyone, nobody has given them any answers, nobody has been able to figure it out and you utilize something like stem cells, which is simply just harnessing literally the healing power of nature, like the most natural catholic thing that you can actually do and they heal and it's just, it's so beautiful. So I don't think that we really have any limitations right now. I think that we're only just scratching the service, I would love for stem cell therapy to be the first line therapy for anytime somebody is looking for a knee replacement or a hip replacement or Undergoing a surgery instead of them having to undergo surgery. Do you know how many millions of dollars we could save as a country as people by just simply doing stem cells.

It would be, it would change the entire paradigm of health care. A 100%. – Yeah. I mean all these unnecessary surgeries that are being done when you have so many options that you can offer before you get to that point and and people think that just because I am getting a knee surgery now that it's going to be all fine for the rest of my life

and it isn't, you know, there's so many complications that come along with it.

So why not then try something as natural as this where you then are supporting regeneration and kind of kicking that in and and yes, maybe if you get an X ray and maybe the cartilage is not perfect after, but you don't need that huge amount of cartilage in order to make that need functional.

So, I mean to me it it just might make much more sense to take these safe and regenerative medicine steps first before you throw in, you know, things that are foreign to the body.

– Yeah. And I told I definitely have to speak to that too because the number of patients that I've seen in my practice who have actually already done the surgery and they still have pain afterwards, the surgery didn't actually help their pain. And the nuance to this is that, well, the surgeon is only looking at your imaging nine times out of 10.

How Stem Cells Support Healing

They're not even putting their hands on you to do a physical exam to even assess what might be going on in your body. And so if they're only treating you based on imaging, it's so likely that they're going to miss what your pain generator is.

And if your pain generator is actually not a structure that's going to be impacted by that surgery, you're still going to end up in pain. But this is something that we can actually fix with stem cell therapy, right? It's a fast physical exam for me to figure out what is actually generating your pain and then understand how to actually treat that structure.

So we can get you meaningful relief. – And the beauty and correct me if I'm wrong. The beauty with stem cells is that they obviously they don't just stay where you put them. They go where they are needed.

They are driven by, let's say if there's a nerve that is signaling and it's inflamed and that's what is causing the pain and not the structure in itself, then it would go towards that nerve and work on the nerve and and maybe do the knee as a secondary, but it will go then to the area where it's needed.

– Yes, absolutely for better where stem cells are going to travel and you know I always I'm just amazed at some of this like random effects that some of my patients get like people who have had their eyesight improved people have started growing hair back on their head again.

I had this one lady and we treated both her hips and her sacrum and she's like this risk that I injured years ago, that was you know, I thought it was just going to be what it was going to be. Well it actually started to heal again and it was just like we didn't go anywhere near there, We were in her hips and her sacrum.

But you know 68 weeks later, all of a sudden that wrist is coming back online. So we you know, we can be as intelligent as we can with our limited understanding of the nuances that control us at our very cellular level.

I mean there's so much to be said about the quantum intelligence or the stuff that drives the living cell. You know, we are just scratching the surface but it is really incredible to witness. – And that's also so cool that you're bringing in the mindset because you know like like you're saying the that quantum field, I mean our our mind how we how we think how we behave our intentions, how are all the cells then actually they respond to that and they obey what that is. So if you then when you do stem cell injections or I. V. S then to really maximize the goodness out of it by kind of being in that mindset of seeing the healing the healing juices from it and it's just going to potentiate than the therapy so much more.

– 100%. And I think this might be the first time I'm admitting this but whenever I'm handling a patient's cells tissues, I'm always really trying to like center in love around them because if it's doing something great I obviously wanted to do something but you know our our Hartfield our love field can be felt up to I think it's what eight ft around our body or something like that.

You know if I'm gonna be throwing my intention into a sample that I'm processing, I'm going to actually hold it in

that vibration of love as much as I can and you know put that healing intention into it so that yes, hopefully that vibration is then translating into it and translate back into my patient.0 – And you have, you know, the impact of just plain water. I mean when when you have intentions that you do it and water, they've taken you know photos as you know, but you know, for the listeners you can send them love, you know and then they will create a certain crystalline structure that is just gorgeous.

And then you would send maybe the intention of hate onto that water and it just looks ugly that the structure of the water. So you can just imagine then something as living as a stem cells. If you introduce that intention, that is a positive love, you know the impact that it can have.

– I agree. And yeah, it's Dr. Masuro Emoto's work that you're talking about, if you, whoever's listening wants to look that up, it really is incredible stuff. He did study that pretty in depth and you know, we know now that water holds memory and of course being a naturopathic doctor of course you've studied homeopathy and all that good stuff and all that, those energetic bases too. And there is something to be said for all that.

– So when you do the stem cell preparations, are there certain things that comes kind of standard that you feel like, you know, do you they have to have like a Meyers cocktail along with the glutathione or or they need to kind of bring in some peptides into this, you know, some BPC 157 or there is kind of certain standard protocols that you feel really maximize the effect and of these stem cells.

– Oh yeah, I bring in N A D with all of my stem cell patients. I love N A D. I think this thing, I mean it's like the closest molecule to magic, I think that we have in our in our setting besides stem cells.

I love N. A. D. for a couple of reasons. One. Well N. A. D. has the ability to do something called mitophagy.

Who Is Not a Candidate for Stem Cells

So it actually has the ability to clear out old and dying mitochondria that maybe shouldn't be there anymore. Which is really really useful because when we're putting stem cells in if they have the ability to donate their mitochondria we want them to really do that when it matters. So we really want to set the stage for that.

Now of course. He also has the ability to heal a lot of different other tissue types especially things like nerve, the heart tissue. The ovaries were working people with infertility there's just so much so much good that can come from it.

So that is a part of all of my treatments. – Tell me a little bit more about what N. A. D. Does I mean. So it's yeah you're cleaning out some some unhealthy mitochondria.

But what does it do in this cell as well? I mean how how do people benefit from over and above that? You know the N. A. D. – So N. A. D. And for anyone who's listening it stands for nicotinamide adenine dinucleotide.

It's a really long. Obnoxious name but it's actually a co factor in your in your system. Everybody has it naturally occurring are levels do start to decrease as we get older and it is closely related to like your niacin because it's nicotine amid. nice and they're very closely related which is another one of your B vitamins. When it actually gets into the cells because it's a co factor and a lot of reactions. There's about 500 different things that it does in the body. A lot of people will tout it as the anti aging molecule because it will actually activate your sirtuin genes which is your anti aging genes.

And additionally it's great for energy, it's great for cognitive function. It's great for hormone production. There really isn't a lot that N A D. doesn't do. It's a it's a phenomenal molecule.

They actually even use it in addiction treatment centers. I've actually used it in my clinical practice to help patients get off of prescription medications, traMADol, gabapentin, tin, various opiates.

And it works incredibly well for cutting that, for cutting the withdrawals almost to nothing. – Yeah. Yeah. It's

amazing. I know. Also there are some studies in regards to PTSD young people coming back from the war doing kind of heavy dozing of like 100 mg. I'm sorry 100 yeah.

– 100,000 mg. A high dose. – Yeah exactly. And doing that twice a day actually. So it's actually, no it's sub Q. No it is 100 mg actually bring it up to 200 mg. Sub Q before noon.

And that's yeah so doing that type of therapy for I think it's like three weeks or so. And it's fantastic for PTSD, you know because obviously PTSD is a very kind of inflammatory condition, the brain. And they also you know if you can trigger the mitochondria the healing, clearing out some of that old mitochondria reducing inflammation.

You know it's really fascinating. -Yeah it's a phenomenal molecule. I do love subcutaneous doses as well. I have a fair amount of patients who have it and I have them do what I call micro doses.

So anywhere from 10 to 60 mg, subcutaneous li for that enhanced cognitive function. So a lot of high performers CEO things like that. – Yeah it's one of the things that I love to do myself one.

So what and that's I'm curious what do you do for like bio hacking? I mean because obviously you work hard, you want to make sure you stay you know stay focused and be able your brain is functioning, stay young and healthy.

What are some of the bio hacking things that you do? – Oh my gosh that's a good question. So I used to be a really hardcore bio hacker. I would do all of the things I've really parsed down a lot of that stuff and I've gotten really just simple and strategic so I do a red light sauna.

I have a sauna space sauna, I'm not sure if you're familiar with them but they are actually they have a Faraday cage. So it blocks out all E.

Exosomes, Stem Cell Signaling, and Future Potential

M. S. It's really beautiful and it has a red light as well. So I'll sauna in the mornings and then I actually don't drink any coffee or caffeine. I've cut that out of my life.

I read a really interesting book called caffeine Blues. I think I have it right here. This guy um really just dives into the complete horror that caffeine actually is and what it does to the body.

So I've cut that out and I've actually never felt better. My energy has been better throughout the day even into the evening. My cognitive function has greatly improved as well.

And I used to think that caffeine was helping me. So I hope if you're a coffee drinker, I'm sorry, I hope I don't offend you, but that's what works for me. And then I personally do a carnivore slash annual based diet. So lunch for me is usually some sort of stake usually a rib eye with a bunch of butter and salt on it.

Um Dinner I'll do bacon and eggs, I'll do burgers, I'll do ribs. Um Sometimes I'll do like some plain full fat yogurt as well. Um But yeah and then I really I exercise, I do some reading um hydrogen water minerals and big on minerals. I am definitely big on minerals.

I think actually minerals are the missing piece in a lot of health for a lot of people because we're electric beings and minerals are literally our electricity generators.

And I feel like if people are awakening constant states of fatigue and constant states of tiredness, it's just really strong indication of their electricity has simply been subdued. So big fan of mineral reparation for that in general. And then you take some magnesium, a little bit of melatonin and some blue blockers, and that's it.

Pretty, pretty low key in the bio hacking world now. – So what are the things that you're experimenting with and that you kind of? And the reason I'm asking is because it's fun for people to hear what practitioners do. And then also a little bit of what's, what's out there and what are what the potentials are, you know, that you can play with.

– I've had health issues for a long time in my life and I've been like all my social media have been pretty open with, you know, things that I've dealt with, as far as digestive issues, go, history of eating disorders, anxiety, things like that. And so I used to try to do a lot of bio hacks to try to like heal my gut, right? And as an nd I had all of the things every gut healing protocol that you could think of, every single supplement that you could think of and you know, and I thought that I was doing so good to myself because I would eat salads every day and I would have at least three different vegetables with dinner.

And I was doing all these things and then it just stopped working for me. So that was when I decided to cut all that out, go carnivore. And that was actually what healed everything for me.

And not to say that the bio hacking doesn't work for some people. I think everybody is completely individualized on their own journey and it's worth experimenting with certain things because you can totally go wild with supplements, you have everything from your new tropics to your gut healing stuff to things to build your blood, things to build your bones, things all different types of minerals, all different types of electrolytes, all different types of protein powders and Everything. You can totally get into it.

And I think you know Dave Asprey, he's like the bio hacking leader father about. – I was thinking about him regards to the coffee there so. – I know drink his coffee, I did used to drink his coffee, but I think he takes like almost 200 supplements or 200 pills a day. And I just think like man, did we evolve to need that. And I keep going back to the, I don't know if I want to call the ancestral argument but that you know, humans are resilient, you know, we've made it through ice ages, are our ancestors made it through ice ages. Do we really need to be coddling ourselves this much and maybe we do right, Maybe our environment has become so unnatural that we actually do have to do some degree of bio hacking on a daily basis to just keep ahead of all the things that were assaulted with on a daily basis.

Whether it's the pollution in our environment, the E. M. S. In our air, all the crap they add to our quote unquote food. It's it's a lot. It's tough out there to be healthy right now.

– And how do you monitor yourself meaning thinking that you know, I'm doing these things and am I doing okay or do I need to bring in something else as well because I'm a little bit off in this area? No. – Yeah, I quantify everything.

So I have an aura ring and I checked my data and I'm obsessive with my data on this.

NAD Therapy and Personal Biohacking

And I've gotten pretty dialed in. I mean, last night, I think my sleep score was 94. My readiness was 91, which are really high scores. If you know, if anybody's watching this who understands or a rings, those are great scores. And I also checked my labs every 3-4 months or so. And you know, despite what people might think my cholesterol is perfect. My inflammatory markers are perfect liver and kidney function, perfect thyroids, doing great hormones are overall, great, vitamin D. Is good.

Iron is good. Everything is really solid. And then I also just started using a new device, it's called a lumen. Have you heard of that before? Okay, so it's new to me, it's probably been around for a little bit, but this has been a fun experiment for me to see just how my metabolism changes when I might be stressed or responding to the different types of food I'm eating or when I if I think I'm in ketosis, I'm not in ketosis because historically I would fast when it wasn't appropriate simply because I wasn't hungry, but maybe that wasn't the best for my cortisol levels.

So there has historically been issues with my cortisol being high. And so this is the next thing that I'm learning to quantify for myself, which is, should I be eating in the morning, which morning should I be eating during based on what my lumen is telling me. – Yeah. And that's also so cool nowadays, is that there's a lot of kind of digital tools and you know, bringing in ai and into the picture to learn more about the human body and also learn more about your individual self, how I behave differently than another.

And you can like the or a ring, you know, checking your heart rate variability and seeing, you know, if I do this, you

know, how do I respond or if I do that, how does that respond? So it is, it's really amazing what is out there that you can so you can learn more about yourself.

So yeah, – NAD is really great for heart rate variability every time I take N A D, I always see a dramatic increase in my heart rate variability. So that's a really cool for people who are out there, who may be looking at their stats, wondering how can I increase this?

– Love it. Well, thank you so much Dr. Solt that this has been amazing. And yeah, I love what you're doing. You're doing incredible things. And it's just such a blessing to have people like yourself to to touch people and change, you know, like you mentioned, you know, the they go to these expensive babysitters, you know, at the hospital and which in reality doesn't do much, you know, just watch and wait until we do surgery on your, until there's some extreme crisis. And instead of them having interventional tools like what it is that you have to offer. So thank you so much.

– Thank you such kind words. Thank you again. – Thanks