



Conscious Life presents

How Trauma Freezes Our Biology

Guest: Dr Aimie Apigian

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[00:00:09] Alex Howard

Welcome everyone, to this interview where I'm super excited to be talking with my very good friend Dr Aimie Apigian. And we're talking about how trauma becomes an arrest of movement and how that freeze and shutdown isn't just in our mental and emotional body, it's also in our biological and physical body. We'll talk about the impacts of that on oxidative stress, brain inflammation, but also the importance of movement for healing and some of the other interventions that can support healing the physical impacts of trauma.

To give you a little bit of Aimie's background, Dr Aimie is a double board certified medical physician in both Preventative and Addiction Medicine and holds double master's degrees in Biochemistry and Public Health. She is the leading medical expert on addressing stored trauma in the body through her signature model and methodology, the Biology of Trauma, a new lens that courageously uplevels the old methods of trauma work and medicine by reverse engineering trauma's effects on the nervous system and body on a cellular level.

She's currently the founder and CEO of Trauma Healing Accelerated, where she bridges the two worlds of functional medicine and trauma therapy with a mission to help adults accelerate the healing journey by addressing the biology of trauma that keeps stored trauma stuck in the body, mind and spirit. And her provider's certification course teaches providers to do the same for their clients.

So, Aimie, welcome back. Here we go again. I always really enjoy our conversations. We've just been talking about where we're going to go, which I'm excited about. I had to stop you because I wanted to get it on camera. So welcome. Great to have you back.

Dr Aimie Apigian

Thank you, Alex. It's always good to talk with you and I think more importantly, just to share value with the world.

[00:02:13] Alex Howard

Amazing. So, just before we started recording, you gave me this phrase that I thought was great, which is that, in a way, trauma is an arrest of movement. Trauma stops or impacts the natural flow of movement. Explain.

Dr Aimie Apigian

Well, when you think of life, we think of walking through life, walking through the different stages of life. And so I get this visual at least of someone walking and even a baby learning to walk, right? And then you go to elementary school and then middle school and then high school and then college, and then you're working, and then you're an adult and maybe you have kids of your own, and then you're walking, we're moving through these different stages of life.

It's supposed to be a constant flow. And then what can happen is that trauma comes along and it stops that. And so I literally get the visual of someone who's midstep and it freezes in that moment, the movement stops. So life is all about movement, on all levels, not just through the stages of life, but even down on a cellular level. Life is movement. And when we think of our heart and what it does to send blood out and our lungs breathing, it's all about movement. And so the moment that movement stops is the moment that a person dies.

Alex Howard

As you're talking, as you're describing it, I'm thinking about it on multiple levels. Because of course in the trauma response, there's a very specific thing that happens in freeze, right? So maybe talk about that piece as well.

Dr Aimie Apigian

Yeah. So we're moving through life, we're doing our thing, we're moving through life and then all of a sudden there is an experience, right? And I think we all know by now that trauma is not the experience, trauma is not the event, it's our body's response to that event. There is this moment of complete panic that is so high because we have this experience, this felt sensation in our body of, 'I don't know if I'm going to survive this.'

And even though that can happen on a physical level, like perhaps a natural disaster, 'I don't know if I'm going to survive this hurricane, I don't know if I'm going to survive this storm,' even on an emotional level, on a psychological level, we still have that such high panic. And for those that have the emotional, psychological experiences, it feels even more of a panic because it's at our core, like, 'I don't know if I'm okay to be alive, I don't know if I'm allowed to be alive, I don't know if I'm going to be okay, I don't know if I'm going to make it.'

It's that high panic that freezes the system. And it freezes the system in a high sympathetic tone because we've had this adrenaline coming out. Speaking of movement, right? Adrenaline is intended to move us, to take us into action and so it freezes us in this high panic. And then we have the dorsal vagal shutdown that comes immediately after that, where it's just, 'Well, if I don't know if I'm going to make it, I shouldn't spend a lot of energy trying to make it.' And the body actually goes into this protective mechanism of shutting down, which again is all about an

immobilization. And so when I look at life being movement and all about movement, then trauma is the biggest disruptor of that forward movement in our life.

[00:05:51] Alex Howard

And then do you want to say a few words about how that freeze or that block of movement then meets epigenetics? Because I think one of the things that people often think about is genetics means that our life is predetermined in a certain way. So let's unpack that piece.

Dr Aimie Apigian

Absolutely. So the way that I describe epigenetics, Alex, I don't think you know this about me. My first job was when I was twelve years old and I went to work at the city library.

Alex Howard

You did? Okay.

Dr Aimie Apigian

I did, yes. I was one of those people that took your book and checked it back in, put it back on the shelf, and then checked it out to someone else. That was my very first job.

Alex Howard

It doesn't massively surprise me.

Dr Aimie Apigian

I know, it shouldn't surprise you because it was my favorite job. I think even of all the jobs that I've had, it's been my favorite job. And so the way that I think of epigenetics is a library. And I step into a library, and which book am I going to read? Because there's a ton of books, I can't read them all right now. Which book am I going to read? And epigenetics chooses which books we read and which books stay on the shelf. We don't even open them. We don't even pull them off the shelf. So even though they are there, that's our genetics. We have our genetics, but the genetics doesn't actually run our

life. It's the epigenetics that determines which book we read. And that's where experiences shape that. And so, even though all the books are there, whatever our experience is, coming into that library, that's going to help determine which book we read.

But here's the crazy thing, Alex, and this is, I think, the new 'movement.' Where we're moving into is the field of trauma, is really understanding this interplay between epigenetics and trauma. Because what we understand at this point of even something like PTSD, symptoms that someone carries with them now... They've put it on as a baggage and they're carrying it everywhere. That is all related to epigenetics and the changes that happen on our DNA as a result of something called 'oxidative stress.'

Oxidative stress is a major player in epigenetics to start to determine which genes will be read, though you also have methylation status, you also have histones. But methylation status is

something that you were born with, whereas oxidative stress is that influence that will happen across your lifetime depending on this freeze response, this dorsal vagal shutdown. So let's talk about that.

[00:08:34]

When we're moving through life, part of the movement that happens in our body is that we clear out toxins, we clear out stress. Not all stress is bad. We know that. We go to the gym, we work out. We create positive stress in order for our muscles to grow. And so not all stress is bad, as long as the body is able to move through those experiences at that time and not accumulate the damage.

Oxidative stress is damage from stress. And so when we are in that stress response... And in my world, I distinguish between the stress physiology and the trauma physiology in our body. When we're in the stress physiology, that ability to clear things out will be decreased, but it won't be decreased to the degree that happens in the immobilization of a freeze response and a chronic freeze response.

Now, when we're in parasympathetic, or what I call in my world this calm, alive state, where everything is moving as it should, we're clearing out oxidative stress. That's where we start to see that there should be rhythms in our life. This rhythm of intensity and stress and then this rhythm of rest and recovery, so that I can go back out there and perform again.

You see that in Olympic athletes. They can't always be running a marathon. They've got to have that time of rest and recovery. Why? To clear out the oxidative stress. And so, when we have this state where we're either in chronic stress physiology or, Alex, we're reaching the point where we're going into such high panic and this internal crisis of, 'I don't know if I'm going to be okay,' and our body goes into that immobilization, the arrest of movement state, it's going to arrest the clearing out of oxidative stress.

And what happens is that that oxidative stress starts to bathe our genetics, starts to come into the library and fill all of the space, damaging our genetics and in such a way that our repair enzymes, our repair pathways, our repair systems are not able to keep up with the damage.

And there comes a point where a line gets crossed. And that line is going to be when symptoms turn into chronic health symptoms. There's a diagnosis now, there's this aspect of, 'My body after this experience just fell apart and I've never been able to get back to that.' And that can be the result of this oxidative stress that just sat there because of the inability to move it out and to clear it out. And it actually changes our expression of our genetics, leading to different symptoms, health conditions, diagnoses in our life.

Alex Howard

So this is a really interesting way or another way of explaining a big part of your body of work, which is, just to broaden out for a second before we zoom back in again, which is the recognition that trauma, as you say, is not just the event, it's what happens inside of us. But a lot of the literature and talk around trauma is what happens to our mental and emotional bodies. And the point that I want you just to speak, to amplify it a bit further is trauma also has an impact in our physical body.

[00:12:12] Dr Aimie Apigian

Which is why, when we're on this trauma healing journey, we can't just expect to be able to focus on the emotional or psychological aspects and not address things like oxidative stress, because that by itself will continue to create the dysregulation of our nervous system. It will be what holds us back in our trauma healing journey. So this aspect of... Yes, trauma also becomes our biology. It also becomes our epigenetics, it becomes our physiology. And so we have to include that as part of our overall approach for helping our body get back to movement and the natural rhythms of life.

Alex Howard

So, I want to break this term 'oxidative stress' down a little bit. Can you explain a bit more about what it actually is? But also, before we started recording, you were mentioning also we can do testing for it as well, which is a really interesting way for someone to see where they are on that impact of mental and emotional loads on their physical body.

Dr Aimie Apigian

Absolutely. So I'm just going to take one example in the body that creates oxidative stress, and this is actually the process of making energy. The body takes food, breaks it into smaller molecules that then enter cells and then enter into these factories inside of our cells that take that and make energy. And yet, like every factory that you've ever seen in a big city, there are exhaust fumes coming out of that factory. There's waste that happens in any production of something useful. And that, in the mitochondria, is oxidative stress. And these are reactive oxygen species.

The body has built-in systems to clear this out. Superoxide dismutase, for example. I know that's a big word, but it's a natural repair process and system that we have. Glutathione is a natural repair clearing out of detox stress that we have in the body. So we already have everything that we need in order to maintain healthy movement through our lifetime. And then it's just when that gets disrupted, Alex.

And so when I think of the life force that each one of us has within us and how much that life force moves us forward in life, how much of an external force needs to come in to block that movement, to arrest that movement, to disrupt that movement, and to disrupt things like this natural repair system, superoxide dismutase, glutathione? It actually disrupts that! This is a pretty big force that has to come in to disrupt that.

And so when we look at what do we do about it? What can we do about it? Can we actually assess how much my body has been impacted by this oxidative stress? And I really want to emphasize the accumulation of oxidative stress. This is not just a one time thing that we're talking about. This is a lifetime of accumulating experiences, of going into that freeze response, those multiple experiences of feeling overwhelmed and internally going into a state of shutting down, immobilization.

And so it's the accumulation. I know that whatever you do, you do well, and so you accelerated and started having your fatigue in your teenage years. But for many people, it really starts to hit them in their twenties, definitely in their thirties. By their forties, they can no longer ignore it. By their

fifties, they're falling apart. And so we see this net effect over time, as the body just holds more and more of the oxidative stress burden from trauma.

[00:16:15]

Now, as you say, there are ways that we can measure that. And one of the ways is its effect on the DNA, which is so cool. I just love the fact that we can actually measure how much oxidative stress has been damaging my DNA. And so looking into epigenetics... Because if we can catch it earlier, we can help someone get off on a very different path than if we continue down that train. And that train only has one destination, which is more and more disease, more and more pain, more and more lack of movement.

Now, there are four what we call 'bases' that make up our DNA. They have letters of the alphabet A, T, G and C. And this is all coming out of the work of Watson and Crick. They won a Nobel Prize about this, because they understood how DNA fits together. And it's amazing and beautiful. Let's just put it that way. Now, there's one of those bases that the oxidative stress targets the most, and it's just the most vulnerable.

It's the most vulnerable place in the link. And when you think of it, we all have our vulnerable areas. For some of us, we're stronger in this area, but this emotional aspect is our vulnerable place. Well, DNA has a vulnerable place, and that is specifically the base G. And it's because of its structure, it's because of what we call just the 'charge' on it that the oxidative stress binds to that base more than the others. So that's the one that we can measure.

People can actually measure the oxidative stress on guanine, the G base in DNA. The best place that I use to test this is called DHA Labs. It's the lab that I use in the United States. It's actually where all of my clients come, and we do that. We're also testing the methylation because that will also influence the epigenetics quite a bit. And so we're testing for the methylation status and this oxidative damage.

The specific test is called 8-OH for the oxidative damage and then 'Guanine.' So 8-OH-Guanine, that's the test that you're looking for. And again, I send all of my people to DHA Labs, because I want to be looking at this when they come to see me. But I'm also testing the methylation status, because I'm needing to look at this overall epigenetic effect as someone is on their trauma healing journey, because all of epigenetics will either help them or hold them back. So that's how we can actually measure some of the specifics of how much oxidative stress we have. And most importantly, is it already impacting my DNA and my genetics that I need to be even more intentional about taking antioxidants to be protecting myself?

Alex Howard

Well, I want to start coming into some of the things that we can do to bring back balance. Before we come into pieces, sort of more nutraceutical pieces, I also want to back up to where we started, which is that trauma is an arrest of movement. And so let's talk about the role of movement in bringing back this balance here.

[00:19:50] Dr Aimie Apigian

I love that, Alex, and as I have been looking at teaching this concept deeper with my own audience, I've been thinking back, 'What did I do?' And one of the first things that I started to do, when I noticed that I had gone into that freeze place, that immobilization place, that shut down place, and my body just wanted to lay there, it didn't want to move, and it doesn't want to move... How could I just bring in a little bit of movement? And so, that's when I actually started just rocking. So I will do a lot of rocking with my somatic exercises, but I also bought a machine that will give me a foot rub and a calf massage, because I need to keep the blood flow moving.

If I just sit there, if I just lay there, my blood gets stagnant. And my body, my brain depends on oxygen delivery for life, for being able to clear out this oxidative stress, for being able to bring in fresh nutrients. And so I need to keep the blood flow moving. And so I would intentionally... Even though I felt like just sitting there and laying there, I would position myself in such a way that I could still keep in some movements, but then bring in these other tools that would keep my blood flowing, even if I was just sitting there for a time to kind of pull myself back together.

And then I started bringing in more movement throughout my whole day, so that now I stand when I talk to people like you. Like, I'm not sitting down anymore. I'm not staying in one place all day. My life is about movement. My whole day is around movement. I intentionally put things a little further apart, so that I have to walk just a little bit further to go get that, so that I can make sure that I'm moving.

When we look at just blood flow, I know that I've mentioned that already, but that is so key to keeping our blood flow going. I have had adrenal insufficiency and adrenal fatigue in the past, and that will be something that will affect blood flow. I always used to think that low blood pressure was my badge of honor, Alex. Like, 'Look at how healthy I am that I have low blood pressure.' And I've come to find out, no, it was actually so low that it was not perfusing my brain well. And so my brain, which uses up most of the energy, needs fresh blood flow all the time, and so being able to find that spot where it's not too high and it's not too low...

And so, how are we just keeping our blood moving so that we can have that internal movement. Our breath... When we are in that freeze and that immobilization, our breath stops for a moment and then when our diaphragm starts moving again, it's moving pretty shallow and moving pretty slow. And being able to bring awareness to that...

I am not one that does breathwork because I want to help my body do the breath that it feels natural to take. But when I notice that my breath has gone shallow, I am doing somatic exercises in order to help my body feel safe, to take deeper breaths. So I'm always focusing and paying attention to just how I am moving throughout my day in order to keep my blood flow moving, in order to keep my limbs moving. Because that's also then a big part of clearing out the oxidative stress that builds up.

Alex Howard

One of the things that I found is the more depleted we get or I get, the more the temptation is to not move. And then it just becomes a vicious circle. We're both on standing desks at the moment. It makes a big difference for me to come out of sitting.

[00:23:56]

Sometimes I'm in meetings, everyone sat and I start pacing the room and everyone gets a bit concerned. But it's like it's just needing to move, like taking opportunities to have meetings where we just go and walk. Because the whole of society is structured in a way that everyone's sedentary and not moving.

And the point here that I think is important is it's not that standing at a standing desk some of the time or walking is necessarily going to fix all of the impacts of one's trauma, but it's creating a space from which we're more able and there's more capacity to do that healing work as we're doing it. It's almost like tuning up our system so then it's more able to engage with that other work that needs to happen.

Dr Aimie Apigian

Absolutely. I mean, you even think of a musical instrument, right? You can't just get out the musical instrument that you haven't played for years and expect to make a beautiful sound. You've got to create the environment.

Alex Howard

You're talking about my guitar playing here, because it's not a beautiful sound anymore.

Dr Aimie Apigian

And so we do all of this work to just create the environment for our body... Yes, the external environment, but also the internal environment for our body to have what it needs. And like you say, we're so often running in a state of depletion, in a state of deficiency. And so when we are in that state, our body is never going to be able to feel safe, because it doesn't have what it needs and it doesn't know when we're going to give it what it needs.

Those are the things that we need to change first of all. I love how Dr Porges talks about the priorities around what the body needs. And it's this idea that shifting our state, shifting the state of our nervous system is more powerful in trauma healing than something like neuroplasticity.

We want to focus on the big things and I need to change all these neural networks. Well, yes, but how do you do that? You can't actually change neural networks that adapt to one's environment without changing the environment. And so that's where we have to start, right?

Like if we're coming into an old building, we've got to clean up the place first, before we put in new furniture. Because otherwise the new furniture is just going to get all dusty and dirty and it's going to look like the same that it used to be pretty soon. And so if we want lasting change, we've got to be building in these new ways of living life that support our body and its forward movement in life.

Alex Howard

It's amazing how someone that doesn't take care of their environment can move to a new environment and very quickly the new environment reflects the old environment.

[00:26:48] Dr Aimie Apigian

Wherever I go, there I am.

Alex Howard

And it's like we choose and we create our environment in a way as a mirror to what's happening in our inner world. And so, just to back up to where we started, from a certain perspective trauma is an arrest of movement and so healing is a re-engagement with movement. And so we're creating space and inviting more of that movement back. Let's then come back to what else... Have we started touching on some nutraceutical pieces? Let's start bringing in some other pieces of this jigsaw.

Dr Aimie Apigian

Yeah, I think that what I would want to bring in is another big aspect that shuts down movement, which would be what we call brain inflammation. We have these cells in our brain that are called 'microglia.' They are there to protect us. They keep everything out that are supposed to be out and so they are the boundaries, the walls, the guardians for our very precious nerve cells.

And yet what happens is that when we have either a physical event, like a head injury, a concussion... Even just a whiplash will do that. Anything that actually causes physical bruising to the brain, that will do it. But also intense emotional things, like a trauma will also do it. And having this moment of immobilization and that super high panic is one other reason that will cause this brain inflammation.

And what happens is that these cells, these microglia cells, that are supposed to be the super protectors, unleash so much inflammation, cytokines, chemokines, that are intended to kill the enemy, but damage a lot in the process. And in that process, it really shuts down the delivery of the nutrients to the neuron cells and the brain cells.

And so that's where people can really start to feel that they have brain fog. And many people describe it as like the lights just go off in their brain, right? And what is that? Speaking of lack of movement, there's nothing more frustrating than feeling like your brain is offline, because you can't even trust the decisions that you're making. Your brain is not there with you.

And so what's going to be an essential piece to look at when we start to bring in movement and be able to move forward with our trauma healing journey is what role is brain inflammation even playing in this lack of movement and the relationship between this activation of these cells, the microglia... So activated microglia causing the brain inflammation, it becomes closely associated with this freeze and immobilization.

So if you have other reasons for that brain inflammation getting triggered, and I'll go through a few of those in a second, that by itself will cause immobilization of your nervous system and put it into the shutdown place. So your body is going into a trauma response, not from anything emotional, not from anything psychological, not from any relationship dynamic. Even though you're going to try to find some reason to explain why you're shutting down, it's for a completely different reason.

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And if you do have an emotional trigger and you go into that freeze and shut down place, that by itself will now trigger the brain inflammation. And so now we've got both pieces that we have to work with when we are looking at immobilization. So when you've had any kind of what we call 'priming' of these cells, where they're more sensitive to stress... And I think most people who've had trauma tend to be more sensitive. They are more sensitive to stress, and that means any kind of stress.

So you are no longer the type of person who can stay up late and party, or go out late and eat and drink whatever you want. Alcohol is really going to affect these primed microglia. So that can be the trigger for a whole trauma response that you're not even aware of, 'Oh, I ate this food,' or 'That late night last night was enough to put my cells over into this line.' You're going to just be feeling the overwhelm, you're going to be feeling the fatigue, you're going to be feeling the exhaustion of that shutdown and assume that something emotional happened.

And so you may start blaming your partner, your friend, your work. You may start making decisions based on what you think happened. And yet it was really something else entirely, something physical, something chemical, a copper excess. There's so many things that can trigger brain inflammation that have nothing to do with trauma per se, and yet still put our body in that place of immobilization.

Alex Howard

The original cause of the oxidative stress and the brain inflammation and the overload in our system may have been an environmental factor or a psycho-emotional stress. I think what people sometimes find hard to make sense of is why it appears that they're so easily triggered by things that are happening. I think the point you're making here is really important. It may not be those things, it's what's happening inside of you, maybe partly triggered by those things, but with all of these other elements that have become imbalanced as a result of the longer term history.

Dr Aimie Apigian

Yeah. And so as we look at just moving from a place of trauma towards a place of life, and actually choosing life, choosing to be alive, choosing to be as alive as we can be, these are all the factors that we're going to have to look at. We can't just talk about a story and expect to have all of these cellular, physiological, biological changes happen. We've got to address all these things in order for us to be moving towards life and to be fully alive.

Alex Howard

Yeah, that's beautiful. So say more about what we can then do to restore that balance. So we need to bring more movement in. You touched on the fact that we can get testing clarity around oxidative stress and so on, and you started talking a bit earlier about some of the more nutraceutical-based interventions that we might do. So walk us through some of those pieces.

[00:34:07] Dr Aimie Apigian

Yeah. Let me start with the big picture, Alex, because for me, where we have to start is working with this immobilization. And that actually happens before we can work with someone's stress response and the anxiety. We've got to work with the immobilization first. And so I look at what are all the contributing factors to immobilization, to the degree of dysregulation that has immobilized us.

And there are low hanging fruits for me. One of them would be brain inflammation. One of them would be toxins, heavy metal toxins. So copper excess is a big one. Something called Pyroluria that causes a zinc deficiency and a B6 deficiency... Those are going to make the nervous system on edge, very raw, very sensitive. And just walking through a room will make your nervous system react and trigger and go into overwhelm.

And so we look at all of those areas that are causing overwhelm. We even have to look at the gut. And we need to look at is the gut contributing to a state of overwhelm and immobilization? And what's challenging, Alex, is that when a person has had trauma and it's affected all of their biology, all of these systems are affected.

And so we're going to find stuff, but it's just a matter of, well, what is the lowest hanging fruit right now? Because I guarantee you that if I tried to tell someone all of the things that they needed to do, they would go right back into immobilization.

Alex Howard

I was going to say it's a fast path to where we're trying to get them away from.

Dr Aimie Apigian

Yeah, exactly. And so one of the things that I work with my team of health coaches on is co-creating a plan with someone, so that we're identifying just the lowest hanging fruit.

Yes, we need to have the big picture in mind. We need to still understand that this is just where we're starting. This is not where we're ending, but having a place to start where what we can do will make a difference in helping their body slowly come out of this place of immobilization.

For me, that always involves some version of somatic work, some version of parts work, and some version of biology work. So what are some other low hanging fruits that I see with the biology? It's going to be the energy piece, mitochondria. And we can look at the role of mitochondria in the trauma response and realize that it is what shuts down. It is what shuts down.

And being able to bring in energy into the system is one of the first things that I do. I see the trauma response as an energy problem. So if I'm helping the body come out of this chronic immobilization of the trauma response, I'm focusing on the mitochondria as an early piece, if I see any signs of mitochondrial dysfunction, mitochondrial compromise, where the system is just not able to make the energy that it needs to.

But sometimes it's making the energy, it's just not clearing out, because the flow isn't there, the blood flow isn't there, the lymphatic flow isn't there. It's being overwhelmed by toxins, it's being

overwhelmed by oxidative stress. So that may be someone's lowest hanging fruit that, 'My goodness! If we could just help them clear that out, we're back into the game.'

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For each person, it really is just having them fill out my assessment so that I can see which system, which aspect seems to be the lowest hanging fruit here, that we can come in and support. And then that will bring in more movement, that will bring in more capacity. And guess what? There will be the next level of lowest hanging fruit and we learn to support that. And then after that, there'll be the next lowest hanging fruit, so that we take it in pieces and figure out what will bring the most movement at this time.

Alex Howard

And I think that's a really good point around working with skilled clinicians that can sequence that intervention in the right way. Because one of the things that always makes me nervous is when people watch interviews or so on, and then they just start ordering all the supplements and then just start self-medicating with those supplements. And actually, sometimes they're causing more toxicity by taking things that they don't need than they would not taking it at all. And so figuring out what, where and when in intervention, I think is often very important. Right?

Dr Aimie Apigian

Yes. So saying that, I know that people still want that magic pill.

Alex Howard

Yeah, can we have the magic pill as well, please?

Dr Aimie Apigian

They're still wanting me to tell them exactly what to do. Here is what I can say that everyone should be on. Yes, you still need your personalized plan and this is what everyone should be on. And that would be magnesium. So we are a world of magnesium deficiency right now. And the more stress and trauma that you've had, the more you're depleted in magnesium. Because magnesium is needed for so many reactions in the body. It's needed to make energy, it's needed to clear out oxidative radicals. So, magnesium is a safe thing for everyone to start taking. I would want them to take what's called a chelated form of magnesium, not magnesium oxide.

They can go to my online store to see what are chelated forms of magnesium that they can go and find. So that would be one thing. The other thing, Alex, would be antioxidants. So everyone in my mind should be on antioxidants. Now, you can get antioxidants in your food. That's why I eat a lot of blueberries. I eat these types of foods that are rich in antioxidants. And the most powerful antioxidant that I think everyone should be on is vitamin C.

Thankfully it is cheap, it is available no matter where you are in the world, I think. And so vitamin C would be a very great place to start, to just start protecting your body from the oxidative stress. And a good dosage to start at would be 2000 milligrams a day. So 1000 milligrams in the morning,

1000 milligrams in the evening. Vitamin C is a great antioxidant. Now, for most people, that will not be enough. So again, I'm just saying this is a place to start. This is not the place to end.

[00:40:48]

But start with magnesium, start with vitamin C, and then I would start with zinc as well. Now, you don't want to do too much zinc, because you can run into trouble depending on your copper levels. A dosage of 15 milligrams of zinc would be a safe dose for most people. They can get started on that and just start to create that buffer and resilience for their nervous system. But this is not at all a complete list of what a person should be on and they need to have it personalized to them. But this would be a place where everyone can start and I think we should be on these three things for life.

Alex Howard

Fantastic. Aimie, for someone who's watching this, who's thinking, 'Okay, well, I've tried so many things...' and they still feel they're stuck... And hopefully this movement piece is a good, fresh perspective. But what's possible with healing? I always like to end conversations like this, where we go a bunch of different, more technical pieces. What's the actual possibility? What's the potential for healing?

Dr Aimie Apigian

Alex, I don't think we even know the potential yet.

Alex Howard

Good answer.

Dr Aimie Apigian

I still think that we're looking at what else could be possible? Even when I just look at my own life, my own healing... And I've kept up my old YouTube videos that I started with and I'm embarrassed about them, Alex, because of how I look in them. It's clear that I'm not feeling well. I'm talking about, 'I'm in the freeze response right now. This is what it feels like.' And yet people tell me that when they go back and watch those YouTube videos and then they see me now, they have so much hope for what is possible.

And yet I stand here today, and you know how much I travel, you know how much I'm able to do. I used to not even be able to get out of bed. I had such bad chronic fatigue. So when I look at my life today and how much my capacity has changed, my capacity for movement, my capacity for life, my capacity to be present for someone else, for myself, for stress, for growth, for expansion, this is not the person that I used to be at all. And yet I can see, 'My goodness, what else is possible?'

I know that I'm not at the end of my own potential and possibility. Not even close. Not even close. Because I can stand on my edge and see that now I can't even see how far out the horizon goes. So that's where I get excited for people. Because I try to hold the vision for them of what is possible for them until they can hold their own vision. But I mean, the possibilities, the potential,

we still don't even know. I think we're still tapping into stuff that's going to make a huge difference for trauma.

[00:43:44] Alex Howard

Awesome. That's a good place to end. Dr Aimie Apigian, thank you so much for your time. I really appreciate. Oh, before we finish, where can people go to find out more about you and what is some of what they can find?

Dr Aimie Apigian

Yeah, they can go to traumahealingaccelerated.com. There they will find information on having a Biology of Trauma Health Coaching Session. That would be a great place to have a personalized approach to this stuff that we've talked about today. We can help get them labs done, labs reviewed, and so they can find all that on traumahealingaccelerated.com.

Alex Howard

Amazing. Dr Aimie Apigian, I always enjoy our conversations. Thank you so much.

Dr Aimie Apigian

Thank you, Alex.