Introduction and Brain Health Origins

But welcome to the reverse Alzheimer's Summit. And I'm Dale Brunson, and I have the wonderful honor today of interviewing our daughter, Tess Bredesen, who is a brain health coach.

Tess, welcome to the reverse Alzheimer's Summit. Thank you. Dad. Or should I say thank you, doctor Griffin. It's wonderful to be here and really excited for this conversation.

Yeah. That's good. So I think your journey has been an interesting one. And, your how you've kind of looked at, the, the brain and brain health. And as I've said to many people, you are fortunate enough to be in the first generation that will not have to worry about Alzheimer's disease.

In my generation, this was one of the biggest concerns of people as we age. Are we going to have our mental faculties fall apart or are we going to develop dementia?

And for your generation, fortunately, there's now so much to be done that you have a, you know, much better situation. You can worry about other things without really worrying about that.

So, if you could start by just to, talk that a little bit about, how did you get interested in brain health and how did you get interested in, cognitive decline and what could be done to prevent and reverse cognitive decline?

Yeah. Great question. And coming from, the British household, it seems to be in the genetics, but really it comes back it goes back to, what, you know, as our diet.

When I was younger, when we were in San Diego or even before that and, at UCLA, when I would say our typical Friday night was one of perhaps pizza, or, Annie's macaroni and cheese, sometimes ice cream, sometimes Betty Crocker brownies.

And while I remember those, Friday nights fondly, I think ultimately we did realize, the link between what we were eating and, how we were thinking, how, you know, how we felt waking up on Saturday morning.

I think the link was made very clear to us when mom was diagnosed with breast cancer and understanding, you know, her history and the amount of stress that she under went, as a resident.

Right. When she was in medical, when you guys went through medical school and then later on having, you know, so many of those kinds of Haagen-Dazs and, you know, so much sugar, so many, pro-inflammatory sources that ultimately, you know, looking starting to look under the hood.

We did start drawing this connection. You know, nutrition is about so much more than the number on the scale, right? And typically when we're thinking of nutrition, that is the link that most people make.

What we eat right is directly linked to kind of calorie is calories in equals calories out the number what it reads on the number, the scale. And yet there's so much more to nutrition than just that one metric.

It's not that it's not an important metric, right. But it's one of so many here. And so to be able to kind of see that link starting kind of understanding what our family history looks like, what mom's diagnosis meant to our family.

And then with, I think the, you know, the first book that I read on the subject was the China Study. Yeah, understanding casein and the effects that Casey has on, tumor growth or suppression.

And so that was kind of, I think the, the origin and from there, from that seed planted, going from there and, you know, going to Berkeley and studying nutrition, kind of thinking this is going to be a hobby of mine, nutrition.

And simultaneously, your protocol in the lab and understanding what nutrition meant to the brothers and protocol ultimately was this, I mean, truly a serendipitous event in my life that that allowed for me to turn this Columbia, into a career that then, you know, or a practice that I could then implement your science in a more practical, more pragmatic way for for people to understand how the science relates to, you know, what it means to be at the grocery store, what it means to wake up in the morning and apply the routine.

Right? So that I think that's that's where it goes back to. Yeah. And of course, you spent the last several years as a brain health coach and, maybe talk a little bit about, a client, an example that you've seen because I know you've had some wonderful results with some of the clients you've had coming in who already have cognitive decline or of course, in some cases are interested in preventing cognitive decline.

And you've been very successful with getting them to change their backgrounds, change their lifestyles, change, look for the right things, get the right evaluation, and and get going in the right direction.

So maybe talk about an example of someone that you've worked with. Yeah. Well, first I have to start by, you know, giving credit where credit is due. And you were the one who really taught me how to interpret these Recode reports.

Right. And to really understand how they relate to the ultimate personalized or customized protocol that we developed together. And then I help implement with the client.

So, thank you for the hundreds of hours that you put into my personal education and I would not be able to do and my clients would not have reached the level of success that they that they are able to reach.

Without that, behind the scenes, help. So thank you, dad, for helping me and and my clients. Right. Because my clients, I think that's where the the magic happens is in these in the weird moments where when we're meeting once a week for an hour a week, ultimately it's about, sustainability.

Right?

Client Success and Sustainable Nutrition

So I talk about, you know, I say, for example, if I were to recommend eating a kale salad for every meal, for the rest of their lives, maybe they do it for a week and, you know, by the end of the week, they're kind of miserable.

They're kind of sick of kale, but it's it's not sustainable. Right. So it has to be kind of the sweet spot where it's going to address their the criteria that we want to meet, but we also want to make sure that it's enjoyable. Right.

Nutrition and lifestyle should be enjoy it too. So finding that sweet spot in that kind of in that Venn diagram of what is addressing their contributing factors in a way that is sustainable is really important.

So, I actually have one client who is also a coach, and she's doing really, really well. She had a number of different contributing factors. But, one of the things she always reminds me of is that information is not transformation.

So we always kind of go back to this understanding of, okay, just because we have the knowledge, how does that translate to the incorporation? Right. To, your routine, your 9 to 5.

Right. Where does this fit in? Especially if you're working. Right. If you have if you have an actual 9 to 5 getting a lot of these various components of the protocol into your schedule can be tough.

So, you know, finding the time, putting it in your calendar, making it a priority and where it can fit is oftentimes the that missing link from nation to transformation.

Yeah, it's a really good point. And you know, it's amazing to me how much things have changed, in a decade. And back in 2011, we applied for the first comprehensive trial with let's try to do multiple things and understand what's

causing each person's decline.

And of course, at the time this was considered a 100% terminal illness for someone to actually to get cognitive decline associated with Alzheimer's and pre Alzheimer's.

So, you know, we were just hoping, you know, is there anything we can do that will change that? You know, change that, equation. So we're going in the right direction.

And I'm sure there are more things that we're missing. You know, we're going to have to keep evolving and keep evolving and keep tweaking it to make it better and better.

But as you pointed out, getting people to do the right things, getting the compliance is a huge issue. And you can't just tell people, here's a list of 50 things.

Do them all. It's just it's not going to happen. You know, and as they say, you know, if you just give someone a pill that only about 70% of people will take the pill, 30% won't even take the pill.

I'm just looking forward to easier. And yet still, it's still so it is hard to get people to do the right thing. And yet, you know, we know that if they don't do the right thing, that they're going to continue to decline.

So I think you've done a really fantastic job with a lot of the work arounds and, you know, getting people to realize, hey, this is not the end of your life because you're not going to be having chocolate milkshakes right now, or you're not going to be having, you know, lots of brownies.

That that was actually embarrassing hearing about all the stuff we used to eat on Friday. And it's true, I and all that stuff. Oh my gosh, sugar flood.

It's horrible to hear it now, but, in any case. So one of the things you've done really well is the workaround. So you even when you first started to see a health and you were looking at things that could be helpful for people and yet could be delicious and fun and enjoyable.

Could you maybe mention a couple of things? What are some of your favorites that have been fantastic workarounds for people so that they could keep on a plant rich ketogenic diet, could do the right things, could continue to have their metabolic flexibility, and could continue to have, their, their insulin sensitivity, everything that they need, ketosis, etc., for brain health and yet could have things that were really delicious.

Yeah. I think like you're hitting on this critical component here, which is the, the enjoyment factor. Right? The connection and the joy of food. I think there is so much to be said of the joy of food.

Yeah. When we a lot of times when we talking about nutrition, we tend to forget or it's, it is lost in the conversation around macronutrients or good fats.

Ketosis is going back to, the amount of joy that that that food represents or can present to us. So I like to so in the beginning of, you know, if a client is going through a program with C, and we've spent that first session talking about a number of different things, but one of them is, my clients, foods that they enjoy, right?

The, the types of cuisines they love, the types of, you know, do they like, sweet? Salty? Neither. Both. Right. What are the what are their favorite types of meals?

What are the foods that they eat when they were young? I think this is it's not a biomarker, right. This is not their high sensitivity CRP. But I think it's a critical metric.

Right. It's something that can't be ignored because then we'll continue to go back to what they love and build the workarounds around it. Right. So it's not you have to give up for things that you love in order to make this protocol work for you.

It's how does the protocol revolve around or how can you translate it into something that you love? So for example, you know, or we actually try it now that Betty Crocker is no longer a part of her Friday nights.

You know, I, I love chocolate brownies. So I made a, you know, I translated a Betty Crocker recipe into a more compliant recipe with, you know, different, you know, Cat Rock the cow and some nut butters and even a little bit of psyllium husk.

I actually like using psyllium husk in baked goods, because actually helps me at least, eat a little bit less of that baked good because it's going to fill you up a little bit more quickly.

Yeah. For a, for example, if someone really likes, you know, toast in the morning. Right. That's a, that's a common one that I see that, you know, you know, starting their morning out with a piece of toast right.

That's pretty common.

Brain-Friendly Food Swaps and Pizza Workarounds

So, you know, breads like, either you can make your own bread, you know, kind of like a paleo nut and seed bread, or you don't want to, you know, be in the kitchen.

Then there's, you know, Juliet Julian Bakery, paleo bread or Uprising Foods. They have what's called the Q but, that is a ketogenic friendly, nut and seed bread.

So, you know, other examples are, you know, if you like tacos, there's this Yeti bran and there's almond flour or cassava flour, you know, tacos as opposed to flour, corn tacos.

So there's a number of kind of, you could call them swaps, right? Brands or recipes that it doesn't mean that you have to be giving up the foods that you love.

It means exploring and understanding what is out there that meets the criteria that we are often. And a lot of times, the criteria that we're after is oftentimes lowering the blood sugar or getting higher levels of ketones.

So depending on my clients and what their goals are, we're going to find the foods that work for them that they are able to then translate into a really enjoyable meal.

Yeah. And so what what do you say to your clients who say, well, you know, I really do like to have that pizza every now and then. Yeah. And I know you've had workarounds for pizza.

What do you typically suggest to them. And that's a really great question. And I could actually put it back to you too, because I know we have a couple of good swaps for pizza, which is, which was one of our favorite foods in the household, a long time ago, but I would say so.

It very much depends. Right. If we're going for something that like, you know, we want pizza multiple times a week and, and that's something that was usually on the menu multiple times a week.

Okay. Then maybe there's a little bit less flexibility, right? Maybe we want to find a really good cauliflower crust or a recipe for a cauliflower crust, with, you know, depending on your sensitivity, to, dairy, perhaps it's, you know, a different, a nondairy cheese, like, Kite Hill, for example, is one good almond based cheese.

And then, you know, pizza is actually a great vehicle for a lot of these different veggies. Yeah. So, you know, not all pizzas created equal. You can make a really good, you know, cauliflower or flaxseed, pizza crust and kind of build on top of it to make something that is fiber rich and has plenty of good omega threes.

As opposed to this pizza, that kind of leaves you feeling sluggish and increases your inflammation and glucose. So that's, I would say more of that if we want to have it all the time.

And then sometimes, you know, life happens and life can be a little bit messy. And maybe you go out and and there is a party, maybe there's a Super Bowl Sunday that you, you know, that the only thing that they have there is pizza.

And you forgot to bring your, you know, more compliant pizza or you forgot some nuts and seeds to put in your, your, you know, your pocket or your purse or something like that.

And if it happens, like, you know, part of this is we have to remember that when we are feeling stress and guilt, it affects our digestive systems and therefore can actually you know, disrupt our microbiome even more so than if we were just a little bit less stressed and eating that same pizza.

So the first thing to do, I would say, is if it does happen, relax, enjoy it. Right. And then there are some kind of workarounds for post pizza, if you will like, for example a short walk.

So if you do have that pizza pizza every once in a while, right. Make sure first that you're having fiber with it. So just like you mentioned in the end of Alzheimer's and, Alzheimer's.

See, food a triangle, right? That's true. With a simple carbohydrate in the absence of fiber is what leads to more hyper inflammation. So making sure you have, you know, if there is a side salad, maybe some roasted broccoli on your plate, or even you know, there are some psyllium husk that comes in capsule, so you're sneaking some psyllium husk capsules in your bag.

If you know, if you're prepared that the the pizza is coming for you. So having some fiber on board and then after the pizza, you know, doing some light activity.

So that could be, you know, helping with the chores, maybe cleaning up the kitchen a little bit, or even convincing your family to take a short walk around the neighborhood.

And then, of course, what, what we like to do is having something like a mint tea, which helps with lowering glucose or even some cinnamon, which helps lower the glucose.

So there's a couple of things, you know, little, yeah. You can call them workarounds. So knowing that life happens, knowing that life is messy and then you continue on.

So I will pose the question back to you. What are your favorite workarounds. Yeah I mean, you know, I always go back to the biochemistry. What what is the goal here for us to achieve synaptic elastic activity and it's to, you know, reduce the inflammation.

And it's to enhance the support and reduce the insulin resistance and reduce the glycol toxicity and reduce the toxicity. And so, the you know, the workarounds I tend to like are things that are, very low glycemic, and, and, you know, you mentioned, the cauliflower pizza, which, you know, isn't perfect, but it is a step ahead of classical pizza.

And then, you know, looking at how do we work around some of the, you know, the cheese issue because dairy can be inflammatory. You know, as you pointed out.

So that's another issue. But at that and then actually some of the, some of the kind of nut in dark chocolate, I think it's fantastic if you're going to have some chocolate and, you know, I've always enjoyed chocolate.

If you have chocolate with nuts, that certainly helps. And then of course, some things like oat milk, smoothies with old oat milk. So much better than the old milkshakes with ice cream, that we used to have a long time ago.

So I, I really like the smoothies with, with oat milk approach. And then also, to some extent, being careful. I used to think when I grew up, I thought about, you know, just the more fruit you have, the better.

But that can, you know, be and certainly be an issue, for its, glycemic load. And of course, it's fructose, which is

turning out to be, a problem in and of itself as Doctor Robert Lustig has pointed out repeatedly, the issues that arise with fructose are beyond, of course, David Perlmutter has pointed out recently with his book, Uric Acid on uric acid called Drop Acid, which is another piece.

And Rick Johnson has done very, very interesting, basic research on this, and argues that, in fact, a lot of what we see as Alzheimer's disease is really the the organismal response to high fructose over time, which is a very, I think, a very interesting point.

And how much is that's going to account for all the Alzheimer's we see remains to be seen. But I think it's a it's a really interesting issue. So again, I think, you know, increasing fiber, decreasing simple carbs, switching over to things like oat milk as opposed to dairy, standard dairy, all of those things to me have been really good workarounds to help.

And I'd say the number one workaround for me personally, has been that my favorite food has changed from pizza to salad and salad. My gosh, you can put everything on it.

You know, you can have some wonderful, avocado on there and some wonderful beans on there and some wonderful carrots and just kind of go on and on. It's infinitely variable.

So you can switch each day. And it's and of course, when I was in medical school, the way to get people to come to meetings was to serve pizza or cookies or both.

Nutrition Training, Wearables, and Early Biomarkers

And so, you know, that kind of became part of life. And it no question, you know, it hurt many of us with all the stress, with all the staying up all night and then with all the, with all the, the high carbohydrate intake, just horrible.

And for, you know, hypertension for so many and, prediabetes or type two diabetes for so many and dementia for so many, and you know, cardiac disease and just on and off the, the unfortunately the, the, the, the sadness and the disease that we are all reaping.

This comes back, though, to the way I learned medicine. And I wanted to ask you about that for nutrition because you came through a very classical nutrition program at Berkeley, Marion Nestle, you know, one of the most famous nutritionists ever, you know, was, heading up that program years ago.

And so it's a very classic program. On the other hand, you've now had a lot of exposure to the sort of nutrition that helps your clients the most. So I'm always interested in when is modern medicine, going to be practiced by the classical trainees, the and the people who, who trained all of us in medicine?

On the medical side, we've been very, very slow to come up to 21st century. A lot of my colleagues and a lot of my teachers have been stuck in the 20th century.

The prescription pad type of medicine, as opposed to the more modern what I think of as network medicine or precision medicine or functional medicine, looking at root cause and then addressing those things.

When you think about it, organisms work in networks. They don't work as a single thing. Oh yeah, just write a prescription for that medicine and everything will be better.

This is really much more of a business model than it is of an actual medical outcomes model. So when you were, when you were studying nutrition, then how did that compare to what you've learned since in terms of actually helping human beings in need of good nutrition?

Yeah. I think it's really interesting. You bring up a really good point, which is that medicine or your medical training. Really was void of so much of this, you know, nutrition which is more, you know, the, a lot of the root cause of a lot of these diseases that you were learning about.

And that tended to be more of a deterrent for, you know, Tara, for my sister and me, when we were growing up thinking, you know, hearing about your training and, the lack of training around nutrition and using nutrition as this tool, or even, you know, your, your most basic, nutrition guidance for a patient who you may only see for 20 or 30 minutes.

So I think that was one of the reasons I wanted to go into nutrition in the first place was because, you know, being a Bredesen, you are inherently interested in health.

You just can't help it. And yet, I think I saw nutrition is more of the, you know, functional route, so to speak, at that age when I was going through that education.

But still, there was a bit, a tad bit of a letdown in terms of the textbooks, right? When we are looking at nutrition from the textbook, even a place as progressive as you see Berkeley, we're still going to get a lot of that same, food pyramid or plate.

Right? That is coming from, more government resources. Yeah. And so did I learn all the things that I did. I have a great foundation for building on top of for understanding, the more functional medicine, you know, the tie in with glycol toxicity.

Absolutely. But it is, you know, a degree, you know, nutrition degree, kind of enough to, to tailor and customize a, a client's, macronutrient and micronutrient profile for the and protocol.

I think that that took a little bit more of, you know, being, you know, at the dinner table with all of us and talking about, nutrition and talking about the contributing factors and Recode and and Keto Flex 12 three for the many, many, many hours and days and, and months that we do.

I think it took a little bit more of this, overlay. So I don't think that we're quite there yet. But at the same time, because nutrition is a relatively young field, right?

It's a relatively young science, if you really think about it, that we still have a ways to go. And I think translating it to, to patients, to clients in a way that's not, you know, just understanding the headlines in a way that we can start creating more of an understanding of nutrition as opposed to, you know, coffee is great.

It's a superfood. Just kidding. Coffee is horrible for you. It's going to lead to your, you know, decline. I mean, there's so much confusion. And so a lot of the times I think it's just getting the basics, having a client understand, you know, what their hemoglobin A1, C may be and how it relates to their longevity.

Little things like that kind of as a foundation can really help. You know, once you understand your metrics, base, you know, basic metrics, then you're going to have a little bit more motivation to eat the right foods.

Yeah. And, you know, as a brain health coach, you deal with people who are interested in improving. And one of the issues and we've talked about in the past is the idea of wearables.

And people are using everything from aura rings to Apple Watches. I mean, you can now look at you can measure so many things now, you can measure your heart rate variability and you can measure your telomere length, and you can do continuous glucose monitoring.

You can look at your microbiome and on and on. And a lot of this you can do with wearables. So given all of that and given how important these physiological parameters are turning out to be for cognition and and reversal of cognitive decline and prevention of cognitive decline, what do you recommend to your clients and what do you like to use yourself?

Well, I already outed myself as as a big, you know, I'm not a brand ambassador, but sometimes I feel like I am, because I do, and you're a lot. I find that I am motivated by numbers, and particularly those that are offered by aura.

And the other thing I like about aura is that it's not another screen that is giving you that blue light or beeping at you that we are so surrounded by these days.

So I'm a little bit impartial. However, I would say it very much depends on the learning style of a client. So if that person is not motivated by numbers, perhaps a wearable is not right for them.

Oftentimes what, what these people will do is, is look at their, you know, biomarkers, maybe they'll, you know, they'll wear a wearable or, you know, oxygen, nocturnal oxygen saturation monitor.

Like the better for a few days to get some basic metrics and then take it off and not have to think about it or talk, you know, think, you know, incorporate its learnings every single day.

On the other hand, there are some clients who are, motivated by numbers, and I think so it depends on the learning style. But if you are and I happen to be one of those people who, I am, I would say the aura.

And then also, you know, it really doesn't matter. There's so many good ones and so much good technology. It just depends what you already have and which ones you like.

But we can use that data. And, you know, try to understand. I think what's interesting is that different, strategies come out of the, the data for different people.

So for example, some people find that they're not, you know, they have zero or little deep sleep. Maybe you choose, you know, some, some strategies or a set of tools in our toolbox for them.

Or perhaps you, you notice that your heart rate variability is very low. Okay. Maybe that comes with its own set of strategies. So I think, there's a lot of opportunity, a lot of insights that can be pulled from the data.

But if you don't like wearing these devices all the time, maybe you want to do it once or a few times every few weeks to check in on your progress. Yeah.

One of the things that's been really interesting to me is just the change in medicine.

Mycotoxins, Mold, and Environmental Interventions

The medicine that I was taught way back in the 70s and 80s was the medicine of symptoms that were often fairly severe symptoms. You know, I can't sleep at all or I, you know, I can't stay awake during the daytime or I'm getting demented and I can't remember anything.

Now, you know, we are discovering it's a pre symptomatic and minimally symptomatic medicine. We're discovering just as you said. Oh my gosh, I guess what I'm not getting much deep sleep at all.

I'm so glad I found that out because now before it hurts me ten years down the road. And we know very well that you go from change. Beginning of brain changes to Alzheimer's.

Diagnosis is about 20 years. You've got a long run up to this, so there's so much you can do if Hank doesn't know what to do and you just have that feedback, it's a huge issue.

And I know, you know, when when I first started looking at some of the wearables, one of the things that surprised me was, oh, wait a minute. The heart rate variability can be very low.

You do some deep breathing and my gosh, it just skyrockets. And so there's just I was surprised at that huge difference that you actually see in there.

I was also surprised looking at ketones just checking ketones. Yeah. Doing the wrong thing. You're going to see it. The ketones are going to come up as zero.

If you're on the right track, then actually you're going to see that the ketones clearly are coming up and you're doing much, much better. Yeah. So what when you started looking through your, you know, your aura ring and things like this, what surprised you the most?

Were there any of the readings that came out or from your clients or from you that really surprised you? Yeah, in terms of the metrics. So for aura, what I would say one of the biggest surprises for aura, were looking at, sleep data or health data is how variable?

Just like you were saying, how variable heart rate variability is. Yeah. How one of the things actually why one another reason why I like aura is because they have this philosophy of more is not necessarily better.

Right. So, for example, if you are stressed, if you didn't get a good night's sleep or if you, perhaps, you know, ran a marathon yesterday, you did something very challenging at the gym yesterday, today it's going to tell you maybe, you know, your heart rate variability is a little bit lower your readiness score.

So to speak, is a little bit lower. Take it easy right. Choose a more rejuvenating practice. So that day you're going to do something more like yoga or choose a meditation practice a guided breath breathwork and understanding how your heart rate variability and your heart rate and your sleep are all kind of factoring into this readiness score.

That is then kind of guiding you as to what, how much challenge you're going to exert. You know, how much effort you're going to exert today and what what you choose to do.

I think that is one of I would say the biggest takeaway is then in terms of all metrics, hemoglobin A1, C the number of of people who are pre-diabetic and it is not flagged.

Yeah. So I would say that has been, you know, that and mycotoxins are kind of the two categories that surprised me most going into, you know, creating C a health is just humming, just like you said, the kind of pre-symptomatic, folk who are not even coming at this, not for reversal, but for, prevention and looking at their, their metrics and looking at their hemoglobin A1, C and saying, yeah, you know, this is something that we can easily take care of.

It's not easy, right? It takes work, but it's something that's very addressable and left unchecked for, you know, a few more years or decades could result in decline.

And this is something that we can take care of, you know, over the next three months. It's not it's not toxicity. It's not going to take, a year or, you know, a very long time to address if we do all the right things.

So that would probably be, you know, in terms of what I found in the sleep data, heart rate variability, and that's the usage that just how well you can use that data.

And just in terms of the overall population and, and clientele, you know, using and understanding this one, you know, average this one metric and and how, what pervasive it is, especially with our Western diets, that's kind of one of the biggest takeaways from my practice.

Yeah. You know, you brought up mycotoxins, and I think it's so interesting that, we were not taught about these in medical school as being an important thing.

And yet it's at this point, it's undeniable. From the work of witch doctor Rusty Shoemaker, Doctor Mary Appleby, Mary Kay Ross, I mean, on and on on Kat tubes.

I mean, so many people who have been instrumental in understanding mycotoxins related illness. And I just received an email from a group in Australia.

They're trying to get the Government of Australia to recognize and the national health system in Australia to recognize that mold and mycotoxins are a cause of illness.

And the formal view of the entire country of Australia is that mycotoxins have nothing to do with any human illness, which is, I mean, talk about sticking your head in the sand.

It's just amazing. And of course, on the hope that they will be more enlightened over time. But it takes a while sometimes to change a big body that does not want to be changed and really, frankly, doesn't have a lot of incentive to change.

While many, many people are being hurt. And one of the things that we find, in both in the trial that we did and in and in many, many anecdotes before that, that if you don't recognize those and treat those successfully, you don't get the best outcomes.

And so I know you've got a number of your clients who have been on treatment for mycotoxins and what sorts of, what sorts of things have you done to help them with best outcomes?

So what sorts of nutrition have you, worked with them for and what sorts of other sorts of, interventions have you used with them to get best outcomes?

Yeah, it's a really great question because, you know, I did not go into this practice assuming or thinking that mold, or, you know, toxins associated with mold would be a topic of conversation every single day.

And yet that is the case. So I, you know, I would estimate about 50% of my clients have, you know, you know, the contributing factor or a contributing factor, a bio toxin, usually it's a micro toxin.

Wow. And so, yeah, I, unfortunately, I've had to familiarize myself with it through the work of, you know, the astounding doctor Dale Bredesen, but as well, you know, Doctor Neil, Nathan and Shoemaker, I would say the resources.

So there are some helpful resources that I, that I like to incorporate. It's not just, you know, we're not just talking about nutritional interventions here, although of course, that plays a role because, you know, with mycotoxins also comes inflammation.

And therefore food and anti-inflammatory foods have to play a role. But in terms of the resources for mold and mycotoxins, partly is let you know if there is if there is an issue, if it is stemming from inside your house or it does the weather permit you to workout outside or get outside as much as humanly possible?

Because part of it is our systems just need a break right when we are constantly detoxing. And then we talk saying we we need some sort of breaks throughout the day where we can ideally, you know, get some circulation, get some movement, get some fresh, fresh oxygen.

So getting outside is absolutely critical. Mental resources. So, AC three is accompanied by, I believe it's, Doctor Dennis Donald or Donald Dennis, I could be I could be saying it incorrectly, but using theory is a great resource is a great company.

That that has candles. So it's not going to, you know, completely remove it's not going to remediate the mold. But in the interim, there are some EC3 candles and they offer a number of different products related to mycotoxins.

But if the issue is being addressed in the interim, there are some candles that they offer to help to kill off those mycotoxins.

Micro Steps, Burnout, and Final Takeaways

So, the flare one is an infrared kind of a thermo, scan that shows you if a leak is present and therefore you can fix the leak before it resolved. It, turns into an issue with mold and therefore mycotoxins.

And then, of course, the one that, that you and mom introduced me to, which is the, Eric. So getting a really good

Hepa filter and making sure that you're doing everything for prevention as well.

So, you know, there's a number of resources. And granted, this is a really tricky one. This is a one that that takes a lot more intervention and sometimes resources.

Right. And you have to kind of understand that there is, you know, there are, because this is kind of new territory that there are pioneers in the industry, like Michael Scranton's, and then there, of course, are going to be some people who are out to make a buck.

And, you know, and the quotes on remediation are kind of run the gamut. And so doing this thoughtfully with the right resources, with the right, help is really critical.

If this is a contributing factor. Yeah, that's a good point. And it's such an area of flux, people are still learning new things about it. What's cool? There's still ongoing controversy.

And you mentioned Doctor Neil Nathan, who's just been fantastic. And as an example, of course, Doctor Shoemaker would argue that we don't need to actually have antifungals.

We should just be dealing with the in the ongoing inflammation. And on the other hand, of course, Doctor Nathan would argue that, no, we actually do have to deal with the the fungi themselves, the molds themselves, with antifungals.

And so there's, you know, even within the experts in the field, you know, there's there's no perfect answer yet. Yeah. So let's finish up here. I wanted to ask you a little bit about your current work.

You've been working with Arianna Huffington. And her a very interesting company, thrive. And she's obviously you guys are reaching a lot of people. She talks often about micro steps in trying to improve behavior.

And how have you found the work with her and how have you incorporated these sorts of things into your approach to get better cognition and better mental health for so many people that you're working with out there?

Yeah. And this has been really exciting, a really exciting project to be able to kind of have my practice see, and then also be able to work with Arianna and with thrive, I think they're it's more the work is around you know, getting away, having people become more aware that there are things that you can do that can be done to prevent cognitive decline and even, to reduce, you know, stress and burnout.

So it's, you know, addressing employees of companies and, you know, giving talks around, nutrition as it relates to brain health and burnout. And so it's a little bit of a, I would say, a different demographic.

Right? We're not talking specifically to people who are interested in the protocol. They might be interested in, you know, staying sharp, so that they can, you know, live a long life and have a successful, long career, and not burn out.

Right? Particularly, amid this pandemic, it's been, you know, a huge concern that with the stress, with, the uncertainty has come an increase, not a decrease in sales of Oreos and goldfish and alcohol.

So understanding that there is you know, this is a unique opportunity that we have, right now with, you know, working from home, going and going back to the office and, and kind of changing up these routines in order to fit this, this lifestyle and this, this, nourishment that is worthy of us.

Right. And I think the, the philosophy of micro steps. So it's this idea that we're incorporating small little changes that build on top of one another.

So one principle here that I really like, that I resonate with is habit stacking. So you're taking you are building one habit that you would like to do on top of one that you currently do so on an existing one as a way of, you know,

slowly be, you know, setting up your routine and your patterns in a way that you choose as a, as opposed to, you know, the way that it was, you know, already written or the way that kind of chose you.

So I think there's, some great takeaways in this philosophy of micro steps. And then I feel, you know, it's it's been really fun to be able to introduce the concept of, nutrition as it relates to cognition or mental health to the general public, who's course has what are you talking about?

You know, there's there's no way that what I eat is affecting my mood or my longevity. Right? So it's it's, more of the introductory concepts, which has been really fun.

Yeah. Very interesting. And I think, you know, we're coming up against all this all the time that, you know, stress and insomnia and threat and depression and anxiety, these are all tied in to cognition.

And these all impact your cognition over time and therefore address those and affect, you know, your brain's response to this stress and threat is a part just as it's stress and threat from chemical toxins and things like that.

Also mental health stress and threat clearly, impacts. And of course, there's been a lot written recently about, the fact that, you know, adverse childhood experiences also a risk factor for future cognitive problems.

So this is, you know, again, this is all about long term brain health and getting things going, at appropriate times. It's not really it's all interrelated, which is something that, you and mom taught me, taught us from a very early age.

Yeah, well, this is fantastic. And so, the work you're doing is is very exciting. And I wish you continued fantastic success and continue the evolution of the approaches that you're taking.

You know, I really think that, you know, your generation is going to be the one that's going to make it so that these complex chronic illnesses, starting with Alzheimer's disease, are very rare.

And just as you know, we don't worry about, you know, you know, wake up in the morning not worrying about leprosy. We don't wake up worrying about polio or smallpox.

Fairly soon we won't wake up worrying about Alzheimer's disease either. So I wish you continued great success. What message would you like to leave to everyone as we sign off here?

Oh, man. Last message. It is doable, right? Find your workaround. Remember the things that you love and find a way to incorporate into them in a way so that the foods and the things that you do love you back.

That's the biggest challenge that we have. But this is a good opportunity to be able to incorporate a routine that is sustainable for you, so that it's not, you know, this impossible.

I, you know, wake up every morning and I don't look forward to my meals. No, it's what a choose a foods and choose a routine that's going to love you back.

That's my message. That's great. Thank you. You know, I think the last time I grilled you was probably when you came back from a date late on Saturday night.

So thank you for letting me grill you one more time. Thanks very much. That's okay. Thanks, dad. Okay. Bye bye. So. You.