Why Brain Health Matters

I do so much because I have. Seen what happens, you know. With my. With my grandparents. But also I get motivated by how I feel in the moment. I feel so much better mentally when I'm sticking to my exercise, when I'm sticking to the diet.

When I'm doing. Things that bring me joy, and I'm taking my supplements and I can tell when I stray from that. I come from a, the reason why I went into naturopathy medicine.

I dealt with a lot of. Depression growing up. I come from that like mental health history. And it took me. Changing my life holistically and working on nutrition and working on all of that to feel better.

I was on many different medications and unfortunately they didn't work for me. I know they work for some people, but it was the holistic medicine that worked for me, and that's what ultimately brought me to not try to take medicine.

But now when I think about brain health. I do it. I do my exercises, I strength train, I run, I have a mix of cardio. I go to Pilates a couple times a week.

I try to eat healthy because it makes me feel good. Eat whole foods and get lots of good, healthy fat. And you know, I eat. Paleo or cycling to keto because in the moment I feel mentally so good.

And in the future I know it's preventing cognitive decline. Welcome to this episode of the Think Well Agewell podcast. I'm your host, doctor Heather Sanderson, and I'm delighted today to be introducing you to Doctor Rachel Hayes.

She is a colleague and a friend and works closely with me and those very same patients in collaboration with the Neuroscience Institute, doctor David Merrill, who you've met here on the podcast Doctor Bateson and others who support our collaborative efforts to get patients the dementia care that they deserve so that they can see true outcomes.

So, Doctor Rachel, he's there. Welcome. Thank you. Thank you for having me. I want to understand first your why. Why are you here? To help patients who are suffering with dementia and their families.

So I grew up with three. Out of four of my grandparents ending up having dementia in their later. Years. And my yeah, my grandmother, she was pretty. Severe in her later years with Alzheimer's and.

It was. Heartbreaking. It was really hard to see. Me. Lose my grandmother. I look back and I wasn't able to ask her all the questions that I wanted to ask.

Her, like how she came here from Spain, what. Her upbringing was like, and then to see the toll that it took on my family, especially my mother, when she was balancing kids and full time work.

It was exhausting for her.

Personal Motivation and Family History

So I saw how emotional it was and it just for the. Devastating components. Of of. Alzheimer's, the toll it takes on the on the person in the family. And I never wanted that.

I don't want that for my family. I don't want that for my. Kids, for. My parents. And then I tested myself. And I am

ApoE 834. So I know that I also have that increased risk.

So I show up. Every day. To help reduce the statistics. There and make this something that we can prevent and that we can help make a change in that space.

It's exciting work. It's very fulfilling. Do you have any patients that stand out to you? Oh, so many, So many. I am so blown. Away my by my patients.

I learn every day from them. It really. Is so special to. Work with this population. We did an in-person support group for a couple of weeks, and there was some fantastic shifts that happened within six weeks.

Within six weeks, I saw. This one woman go from having three words to more verbal fluency and being able to remember her grandkids, and I mean, her daughter would come in like.

Look, she doesn't have some and ankles and she's speaking fluently. And then there was another woman within that. Class who who. Reverse her diabetes from getting into ketosis and was able to hang with her girlfriends more and.

Play games more. I think. You know, those are just two examples of within a short amount of time, what's. Possible. When people do the work. And it was so inspiring to see just how excited they were and how they lit up.

By the small. Changes. So tell us about that six week program that's not designed. What does it do? How can people get involved or learn more about it?

So it was in person support group. For patients. With cognitive decline. Or I should say people with cognitive decline and their care partner. And the structure of it.

Was based off of your book a bit to really help people with what they. Can implement at home, with exercise, with nutrition, with limiting toxins. But the purpose of it really was. To.

Yes, educate and help. That, but to get. People together to tell their story. And have. That one on one, storytelling and care and support that everybody in that family unit needs.

So many caregivers feel so alone. Yeah. And when you can get in a room, even just once a week with people who are in a similar situation, it can it can lift a little bit of that weight, that burden of caregiving.

Right. And of course, there. Were difficult conversations that were coming up and a lot of emotions, but. Also a lot of. Laughter. And joy. And hearing.

About how. People got into ketosis. What. Was their favorite meals, what they made for their birthday cake, maybe a new gem that they found out about or.

Workout class and activity to being able. To share those resources and. Local. So it's nice. To have that local support. So but yeah, the support groups are a lot of fun.

And we have the online support group we are trying to hit that think well, Agewell support group here. In Encinitas, going regularly so that we always have a handful of couples in their care dyads.

And there and it is I think we do it. We both do this support group work because it is so fulfilling, so meaningful when we have especially those foundations in place, right?

The diet, the exercise, the lifestyle. And I want to talk more about those, but I really want to dive into the medical care that we provide. And so give me a roadmap for what it looks like to become a new patient with you. So you'll come establish care.

And typically we sit. Down for about 75 to 90 minutes and talk through your history. I mean, even starting from, you know, did you hit your head as a kid?

Did you play any contact. Sports as a kid? And what were your. Medical. History?

Patient Success Stories and Support Groups

And we'll go through current symptoms and really get an idea of what what do we need to investigate here and then set you up for labs. And before we get those labs done, we're talking through a foundational plan.

Because there's this is. The perfect time for us to start. The things that you can start. It, that you can start on your own, that don't require a lot of.

Resource. So just changing diet alone. I mean, yes, I would love to get everybody into ketosis and eating more plants and having healthy fats, but even just trying to eat all or all organic.

Whole foods. Limiting sugar, no sugar, limiting carbohydrates. Maybe wearing a continuous glucose monitor to really understand that. Yeah, maybe. Taking ketones to help just drive more ketones to the brain.

Optimizing exercise or getting people moving in. There's some people that come in that. That's a. Great first place to start is just walking to the mailbox or going for a short walk every day.

Get that blood. Moving, And activity. So what. They can do. To help. Stimulate their brain? You know, we see people after they stop working. That that.

Scent that tends to fall off, just stimulating the brain in general, learning new things or maybe even having a hobby. So finding. What is sustainable for them and what they can commit to.

Is it's really. Fun. You're meeting the patient where they're at, but also making it a sustainable plan for them. Yeah, and giving them permission to engage in things that they enjoy that are fun.

Yeah. It's interesting that they would look forward to having more friends and spending more time with your friends playing cards. I think a lot of us have that narrative in our mind that if we're not being productive, it's not time well spent.

Right? And yet it can be supremely productive for our brain health to be engaged with peer group, but with, with something that a hobby like you mentioned, something that challenges us but also really engages.

That's where we're present and really in the moment, to when we talk about that first visit. Yeah, there's the labs that go with it. And then when are you following up with them to review the labs, like with it, with the timeline.

So we'll. Try to get those labs done as soon as possible, because they do take some time to get back. About 4 to 6 weeks. So we'll get you started on the foundational plan, a great time for you to start implementing these changes.

And we'll. Also start. Some. Supplements that could. Be beneficial for everybody with brain heart work, with any cognitive decline or for brain health in general.

And then in about 4 to 6 weeks. We get those. Labs back and go through them in detail. I find that when people understand why I'm recommending something and saying this is important.

It just is. It's more. Motivation for them to stick to it. So if I can under go through the labs and have them understand exactly what it's showing me about their health, about their biochemistry, they're more likely to be involved in their own plan.

And it's a very personalized, precision based plan, because not everybody with an Alzheimer's diagnosis has the

same reasons for why they've got Bagley. So, so we have a baseline visit with labs, hopefully within a day or two after the visit and then 4 to 6 weeks later, we're following up.

And then what happens after that? Take me through like a year or two okay. So we're following up. We're doing the lab review. We're going through all of that data and making this more precision based plan.

And then from there we want to check in about every 12 weeks, you know, retest some things, toxins or nutrient values that we would like to see improving and following up, making sure we're staying in the plan, fine tuning that plan.

There's always the fine tuning. That is the part where, It can it it's better. To stay on track if you can make the fine tuning and stay up with the plan.

There's more. There's more success from that. Yeah. So about every 12 weeks and then once people get to a more maintenance mode, about every six months is when we can follow up and check in.

And again, just fine tune. Health is not linear. Things happen, things. Happen. And things will always come up in life. That feels like a step back. But I like to say it's just just a little.

Speedbump, right? Like there's some there's always something that will happen that we can address on the way. Yeah. And then we can it can motivate us or inspire us to get back on track.

Exactly. And discover something else that we need to figure out. Absolutely. Another piece of our process is health coaching. So can you talk about how the health coach supports this process?

Oh my. Goodness. I think this is maybe the best part is having. That one on one support. So meeting with the doctor is great. You get the medical knowledge and you get the treatment, but then no.

One is going. To be there. I can't be there in the kitchen showing you how to cook keto. So having the health coach appointments, we set one up.

New Patient Roadmap and Foundational Plan

So after the initial you have one to go through the initial plan, go through what it looks like to get into ketosis. What foods should. You be eating?

How do you measure your ketones? What is a. Great exercise routine going through all of that and I like to tell patients. Go to your daily schedule. Make a daily schedule with our health coach.

So that way. You can eliminate any roadblocks as they come up. And then we have another check in after the lab review, because now we're really putting a lot into the plan based on that data.

So it's another great time to. Optimize a. Daily. Routine go through, especially what. Lifestyle things are in the way. So I want to go back to our framework.

We talk about buckets and we talk about I know even people listening might feel overwhelmed. They're like, well, what labs or what are we talking about?

It's this simple. It sounds complicated. So one of the ways I like to wrap my brain around it is to it's really just to create a framework that we can kind of hang everything on.

And so talk me through, like how you view that framework, how you think about it. So I like the idea of the. Bucket because it. You can kind of, organize, you know, why we're looking into certain things and how it can affect brain health.

One would be. Infections. So we are looking at an overall infectious burden on the body. You know, what is this regulating the immune system that can take away resource from brain power, or cause any kind of neuro inflammation in the brain that might look like testing for HSV, herpes simplex virus.

We know that when people have been exposed to herpes simplex and when they have an outbreak, it can cause neuroinflammation. It can cause, More amyloid and tau pathology.

So we test for it. Test. Don't guess. That's kind of our motto. I want to know exactly what I should be chasing. So for infections we'll look at HSV. You know we'll talk about oral health.

If there's any infections in the mouth that we can look into and test, we'll look at an overall infectious panel. So we look at the six panel, look at immune response to all these different pathogens, viruses, bacteria.

Parasites. Etc. and then. Toxins. Is another. Bucket. This is another big one. Especially with this toxic soup. That we're all living in. And we break it down into molds, environmental toxins or chemical toxins, and heavy metals.

So looking. At. Urinary excretion of micro toxins. So toxins produced from mold within the body, from exposure to mold. We're looking at heavy metal analysis.

We're looking at chemicals. Like. Phthalates and parabens from personal care. Products for, VOCs. Or benzene and different chemicals that we. Are exposed.

To and air pollution and, and dirty water. So testing, excretion and levels of those we're looking at signaling pathways. So infections. Toxins. Signaling.

Signaling. I think of hormones. Hormone. Signaling to the brain to grow in your. Muscles. Telling your brain to grow. So hormones we're looking at, and vitamin D amount, you know, vitamin D can be considered a hormone.

And then stressors. So cortisol. Chronic cortisol stimulation or stress hormone stimulation we know can be. Toxic to the brain can cause, Atrophy of the hippocampus.

So we'll look at the amounts of cortisol throughout the day. We're also thinking about if the person's in chronic pain and taking into account any amount of, pain that they might be exhibiting or, levels of inflammation from that.

So I want to make sure I got them. All. Toxins, infections, signaling. Stress structure. That's why we ask a lot about traumatic brain injury. We might test certain markers like NFL for, markers of brain injury, and then.

Sleep apnea. So sleep. Apnea, we know. Is. Cutting off oxygen to the brain while. Someone is. Sleeping and supposed to be restoring their brain and getting into.

Deep sleep. But if they don't have that oxygen at night, then that can be causing direct injury to the brain. So that can be maybe from a structural defect.

So we'll test. That. We'll send people. For sleep studies at home sleep. Studies, and you know, vasculature is a part of that as well. If, someone has, vascular disease or anything with a heart, you know, we want to test cholesterol and their levels of cardiac inflammation or.

SDL oxidase, LDL. You know, all these. Fancy words to look at how cholesterol is being used in the body and if they're at risk for cardiovascular. Disease, And then apiary.

So we know that genetics you know, it's part of our structure. If that increases one's risk. Of. Dementia. I mean, we know like omegas, that's a huge one.

And I see everybody is low in omegas. We know the link with vitamin D as well. So we're looking at these key nutrients. We use micronutrient analyzes to look at the levels and optimize them through diet through

supplementation.

Amazing. And then I think as we go through that list, it really becomes apparent that not every person is going to have the same imbalances. Oh, no. We're.

Looking for at a high level is an imbalance that there's too much too little in the wrong place at the wrong time of all of these different things, have all of these different categories or buckets like you are describing.

And what we want to do is optimize it through creating balance. So giving, providing more if there's to middle and getting it out if there's too much.

Testing Framework: Infections, Toxins, Stress, Sleep

And then in that scenario when we can support balance in a complex system, we get better function right at that neuronal level. Exactly. Which is fun to see. Right?

It's so fun to see when we get to see someone like get the benefits of that. I'm curious as well, you know, this foundational plan, are there supplements that you've seen particular success with that you are sending people home with for the most part, right.

Like, of course, talk to your doctor. Make sure that these are safe for you. But generally speaking, are there relatively safe supplements that people can just get started with? Yes.

Omegas and vitamin D, pretty much everyone is on the low level there, so we're starting everybody off on good levels of, A. Third party tested fish oil to get their omega threes and a vitamin D supplement, creatine.

There's so much great research now. About. Creatine for the brain and increasing energetics of the brain. I tell my patients all the time, think of your brain like a battery.

We want to increase all of that voltage that we possibly can. It's so often that when we were doing EEGs at the office and test. We could test people's. Voltage of their brain.

They'd come in and. Everybody was low. And then they'd get into ketosis, or they would be on creatine and increase their fish oil, and that voltage would go up.

So anything that can increase the energetics and take away the stress and the information on the brain is the direction we want to go. So fish oil, vitamin D, creatine, lithium.

Now lithium is has also great research, even in small doses of. Helping stabilize mood and increase brain optimization. I like a nootropic blend. I think like quality of mind.

To help with. Just being an overall like multivitamin for the brain. I mean, I personally take that and I find. Great success with that. And then, you know, magnesium in those things, especially if somebody is.

Not sleeping. Well or having difficulty with bowel movements. And. Ketones. Yeah. Yeah, yeah. Super helpful. Yeah. I think we've both seen these transformations and patience.

Is there one thing that stands out as the most important? I think keto knew it well. So every like we said, everyone has a different set of labs that will come back and.

I like how you say a smoking. Gun, right? There could be a smoking gun that comes back. And it's usually a combination of different things for people.

But especially. In the beginning when we're waiting for that data. I have seen such incredible. Significant changes with people just getting into ketosis.

It is without a doubt the first thing I say. We have to try this. We have to. It would I would. Feel like a bad doctor if I didn't say, let's work on your diet first.

Right? To try to get some movement. Because. It's through this medicine. You're ingesting it every day, and there are people that it makes a world of a difference. By getting into.

Ketosis safely. With your doctor, checking your ketones, etc.. But that would probably be the one thing. Yeah. And it for somebody who maybe like it can't get into ketosis or who's worried about it like what are they I guess maybe the better question is what are the challenges that you see people face, and then what helps them to overcome them?

They're. The structure of the diet. It's you really are trying to lower carbohydrates very minimally and increase that healthy fat. So you're switching the biochemistry of the body to burn the fat as fuel and not carbs.

So that alone can be hard for people to, especially when they eat a standard American diet that is very high in carbohydrates. To go. Into that lower side of carbs and higher fat.

When we've been told for since the 90s, I think, to not eat high fat, that's higher. That's difficulty. Just making that mind shift. And also, for some people, they're on the frailer side.

We don't want them losing weight and they might start to lose weight if they are decreasing carbs. So we do have. To be mindful about weight loss. And get them on lots of high fat, checking weight frequently, maybe, putting them on ketones to start if we find that keto is inappropriate for them at the beginning.

Making the shift if weight is a challenge, blood sugar. People that are already high in blood sugar might have a difficulty with making that switch, but often once they do, those numbers plummet.

It's amazing. They can. Reverse their diabetes right away. And then, you know, it takes a lot of resource. So being able. To have good quality food. That you can. Cook at home.

And that you can meal. Prep, that's that's how you. Will be more successful with getting into. Ketosis. And not relying on food from a restaurant. But it takes.

Effort and time, resources. And support and. Support. Absolutely. Yeah. I think generally speaking, do you feel like ketosis is what people struggle with the most, or are there other components of the program that, you know?

It's so funny because as we're having this conversation, I think some of my favorite patients are the ones who come in with Doctor Patterson's book or my book, and they're like, I've already gotten better with what you guys wrote.

You know, I want to take it to the next level. I that is such a luxury because those foundations are in place, right? There's some always some fine tuning to do, but they've really taken the initiative.

They've committed to the process. They've already gotten maybe some of that benefit. And they want to just level up. And so I guess I'm curious from your perspective, like what is the difference between the patients who are successful and those who are not?

Well, that's. A part of it, right? If you already come in with that motivation high and the ball rolling, you're in ketosis. There's more room for success there.

But also the support. Yeah, I think that's the biggest. Thing when people have a family unit around them. A football team around them. Right? A team of support.

Those are the more successful patients. It's a lot to keep track of. Supplements and medications and doctors appointments and exercise routines. And. Meal prepping.

So having more people and more. Resources to help with that support. And care team. Is. Ultimately how people can be more. Successful. Yeah, when both a patient and the care provider, like the primary person who's they're day to day when they're on the same page, when they both want to be engaged in this program, that is the ultimate success.

Now, that being said, I've had patients who have been so impressive, they don't have any support, right? And they make it happen somehow. It's incredible.

Core Supplements and Ketosis

And and there's always, you know, caregiving can be a burden. And so there's a recommitment, there's we fell off track. We, you know, things go sideways, something comes up, we get tired of it, and we give up for a bit.

But how how do you see people get back to it like it's there? Or is there something that makes it more sustainable. That care partner. For all the, the whole thing?

I mean, more support, more support. Yeah, yeah. And having, you know, having that time for themselves where they can like rebalancing around and. Get back to what makes them feel joy and happiness.

I think the biggest motivator for people too, is when they have a little win. And so if they can get into ketosis or if they can get a good night's sleep, or if they can do something that makes them feel a little bit better, they're more motivated to go in the direction of feeling better.

Absolutely. So with you, you have eight. You're opposed three, four. So what are your big takeaways like what do you do personally to protect your own brain? Oh I love this question because it's my life.

Yeah. And I'm so passionate about it. I do so much because I have. Seen what happens. You know. With. My, with my grandparents. But also I get. Motivated by how I feel in the moment.

I feel so. Much better mentally when I'm sticking to my exercise, when I'm sticking to the diet. When I'm doing. Things that bring me joy, and I'm taking my supplements, and I can tell when I stray from that.

I come from a, the reason why I went into naturopathic medicine. I dealt with a lot of. Depression going, I come from that like mental health history.

And it took me. Changing my life holistically and working on nutrition and working on all of that. To. Feel better. I was on many different medications and unfortunately they didn't work for me.

I know they work for some people. But it was the holistic. Medicine that worked for me, and that's what ultimately brought me to not try to take medicine.

But now when I think about brain. Health, I do it. I do my exercises, I strength train, I run, I have a mix of cardio. I go to Pilates a couple times a week.

I try to eat healthy because it makes me feel good. Eat whole foods and get. Lots of good, healthy fat. And you know, I eat. Paleo or. Cycling to keto.

Because in the. Moment I feel mentally. So good. And in the future I know it's preventing cognitive decline. So I can break it down a little bit more.

But, physically I was an athlete. So. I really lean into that. It's easy for me to do. I understand that's not easy for everybody, but that's why I really pull the lever, workout every day or go for a walk.

I move my body some type of way every day and with diet, I have to. You know, eat my whole foods and eat my healthy fats. Lots of avocado, lots of. Eggs, lots of good. Protein.

And, I do a lot of, like, meditation and breath work to limit my stress. Be in the moment. I go to yoga. I could apply these. I take my omegas. And my magnesium.

My supplements. And find what brings me joy because I can tell if I'm staying away from. Hobbies. And things outside of work that don't bring me joy. Then I can't show up my best self.

Yeah, yeah. So that's really inspiring to patients, I think. Right. You're working full time. It's not like life is empty for you and this is your full time job that take care of your brain.

It's really you're adding these things and incorporating these things into a very already very full life. And is there something that helps you to do that, to recommit to that.

If you, you know, like you mentioned, I, I can tell that I don't feel as well if I fall off. So like if you go on a trip or you know, people are here from out of town, whatever it is that makes you fall off the wagon, how do you get back to it?

I have. Like my buffers in. Place. That I've learned over the years, and so I have a trainer that I'll commit to go back to. Accountability. Yeah, it's all about.

For me, it's accountability. Mel. Robbins, I'm sure you're familiar with Mel Robbins. She talks a lot about the five second rule and how you have to count down really quickly to yourself. Five, four, three, two, one to get out of bed.

Because our brains are wired. To do it's easy and do it feels. Good. And, you know, try to tell us any excuse to not get out of bed. That is me. With everything.

So I like to have my accountability in place, my buffers in place. So when I get back from a trip and I don't want to get back into working out, I'll schedule something with my trainer.

Or I'll schedule a. Workout class with my best. Friend. Something to kind of re motivate me. With food. You know, I'll wear a continuous. Glucose. Monitor.

That's really motivating because I can see the data in real time. I will, set alarms on my phone. I really like reminding. Myself to do things. So. Like when to get ready for bed.

I have a gratitude alarm every night at 8 p.m., and that's a really great way to draw me back into. My. Gratitude practice. And, you know, looking back on, my self-care, you know, am I checking in with that?

Yeah. So it's the. Accountability.

Support, Accountability, and Staying on Track

Yeah. You and I both great offerings. And we have one continuous glucose monitors. And I think this idea of measuring it can go both ways. So people have a lot of anxiety around it.

Right. Like am I I don't am I doing it wrong. What is it going to say. I'm being measured. And my experience of it has been that when I'm being measured I make better decisions.

I think it changes my behavior for the better. I eat better when I have a clear mind, because I don't want that blood sugar level to go up. When I'm wearing the oil ring, I make sure I get my steps and I get my activity in and I'm going to bed earlier, and I'm drinking less frequently because I know it's going to affect my HIV rate.

And it's kind of a way to gamify it. As I as hold it loosely. Right. It's not perfect. They're not perfect tools, but they are really useful tools. I agree.

I think all of the data is knowledge and or it's power. Yeah, all of that is power. Like me knowing my April E3 four, that's power to me to take accountability and take control of my health, because I know that I can prevent cognitive

decline and dementia.

Yeah, because we're seeing reversal all the time. Exactly. We can reverse this and we can certainly prevent it. Yeah, weird sort of like takeaways. Do you want to leave our listeners with like, if there is one thing that they should know about optimizing their brain health?

Oh, wow. One thing. I think, One thing. Oh, gosh, I want to say so many things so you. Can never do it with. Pain. Yeah, yeah, we we can also go in a different here.

Why don't we do it? What brings you joy? Being with my dog and being on the beach. Running on the beach with my dog. And that's it. That's all the things, right? That's.

That's a lot of brain health protection, right? You're exercising, you're connecting with nature. You're connecting with your dog. You're getting like the mirror neurons of seeing your dog happy, and you get to be happy. And I'm sure there's community.

You run into the same people in your neighborhood who are at the beach. And so I think that that there's the genius in that is like, okay, how do I think the way I think of it as like, check a lot of boxes at the same time, how do I incorporate a lot of my goals into one activity?

Because, yes, for for all of us. Right? Yeah. And so when you can be in community, be outside, be physically active, connecting with with people. And then also like the purpose and meaning that comes from caring for an animal or a child or a loved one, at any age.

But that also is so helpful for the the neurochemistry of our brain. And that is if I could. Think one thing about brain health, and I wish everybody knew it would be how important joy and purpose is for your brain.

Yeah, it's if you. Lean into that, you ultimately will end up taking better care of yourselves and addressing the diet and the exercise and the things that come with it.

If you can lean into what brings you happiness and joy. And that, I mean, that's a life well-lived, right? And it's a reason to to like, just live longer.

We see there was a recent study. I know you're familiar with it, but for our listeners, there was a recent study out of Northwestern in Chicago, and they showed that super agers, which they defined as people who were 85, who had the brains of someone 55, or, you know, if they were 87, the brain of someone 30 years younger, regardless of their age.

And what they found was that the the single thing that set them apart, it wasn't a supplement, wasn't an exercise, it wasn't a diet. It wasn't any of the things that like, we've kind of been talking about.

The common denominator for super agers was that they were connected to a peer group. They had connections. They had social connections that they were regularly engaging in.

Right. And I figured out like, well, we're like, oh, we're connected electronically but disconnected in real life. And I do think that this is something especially for the generations who are coming behind. Right?

The people in their 70s, 80s, they've had a lifetime of in real, in real life connections. But people in their 30s, 40s, 50s, even there, a lot of their connections are online.

And and this is not the same. And that is not going to get you super aging status. No, it's going to increase your. Stress and your. Risk. Yeah. Are there any patients that stand out to you even from the past week or two?

Absolutely. Well, we just had a patient today come in. He's been hospitalized. For the last couple weeks. He came in for a blood draw. And he just wasn't something didn't.

Seem right. You know, his blood pressure was. Through the roof. You're trying to read text because he was experiencing significant cognitive decline over the last two years, actually, since being diagnosed with Hashimoto's thyroiditis.

So we're trying to get some more information. His blood pressure was high. He wasn't. Feeling so well during. The blood draw, so he sent him. Off to the E. R.

something didn't feel right, and he ended up. Having mini strokes. Oh, my. That, But now he's a different man. He came in. Was so. Grateful that we found. This.

Yeah. Gave him good medical advice. Yeah, we found this and saved his life. I guess. But he is now so motivated. He's that he knows, like, this is. His full time job.

He was a high functioning entrepreneur putting work ahead of his health. And now he's so re motivated to do this. And I know that we will help him cognitively.

Because we know. There's so much to do even just. With vascular. Health there. Right. Yeah. And I hope that that story, it's like I would love for that story to inspire people so they don't have to get to that point where they're going to the E. R.

with strokes that they can they can be making find that motivation before it gets to that point. I think that that's one of the big things from my experience, is watching people with more severe cognitive impairment improve is amazing.

But every time I see it, I think, I wish this had never happened to this person to begin with. If we could have intervened earlier. There's certain signs.

Yes, there's so much suffering that can be avoided. So an ideal patient like what are those signs? Like what drives someone in to see you? Great question.

I had this patient a couple months ago. She's in her 60s. She started to. Notice, you know, a. Very high functioning entrepreneur owns many businesses.

But words weren't coming as easier to her. She felt like she wasn't as.

Personal Brain Health Habits

Fluent in her meetings. Something just fell off. You know, her short term memory was was declining a bit. Others around her did notice it too, a bit, but it wasn't enough for her to have to quit her job or anything.

It was those first signs she ended up running those tests on her own. The biomarkers with Peter 217 amyloid beta ratios, which did come back. Abnormal. And decided to seek help for that.

So she found us, thank goodness, because that is the perfect time to intervene before things get too late. And you're at a point where. You have. To quit your job.

Right? So we got her into ketosis. We got her on all those good supplements, we optimize her hormones, and it was night and day. I mean. She was. So thrilled because she didn't have.

To quit her. Job and sell her businesses. She was more fluent in her meetings. Things totally. Shifted for her within. Less. Maybe three months. That's amazing.

I mean, it's so possible. It's so much easier when we intervene in those earlier stages than when we're trying to intervene in the later stages. And we do need the support network.

And yes, she at that stage, she can do it on her own. She can do it all. But I must say she is at risk. She has. We did imaging on her brain and we saw.

Not signs of. What would be associated with Alzheimer's right now, but we are seeing a large area of her brain that was injured in her 20s when she had a traumatic brain injury.

That last rate that will. Increase her risk of dementia later in life. She also one of the main reasons she sought help in the first place. Yes, she was experiencing some weird finding, some early stages.

But she saw. Where her mother went through and she lost her mother to Alzheimer's. So she has that genetic risk as well. So it's. You know, if she were to go off on her own, I would worry that later down on the line she would develop dementia.

But she has done so much now. To prove that it is preventable 100%. Yeah. And even reversible at this early stage, of course. Now, you mentioned Peter 217.

You've mentioned NFL, you mentioned a-beta ratios. So talk us through that. Who should get that testing done? What does it mean if it's abnormal. What does it mean if it's normal. Right.

I, I kind of struggle with this. Like when did people start doing it. Because I think if you're under the care of a doctor who can explain the answer too, great.

The knowledge is power. However, people who are getting it tested on their own and it's. Causing a lot of. Fear, like in this patient's case, already thinking she had Alzheimer's and is going to have to quit her job.

So the Peter 217 amyloid beta ratios and all these are biomarkers that you can now test in the blood. So, peto and amyloid people were testing through a spinal tap in CSF.

Now we can do it in the blood within the last few years. And they are showing higher rates of amyloid pathology in the brain. So it. Could be indicative of earlier signs of a neurodegenerative process.

Like Alzheimer's. And it could be that there's something else going on that we need to investigate. You know, that the NFL can show that there's brain injury from a traumatic brain injury.

We've seen with Doctor Bredesen, right. That the p tau 217 might increase when somebody gets into ketosis. So reflex neuroplasticity. It's very high in children. Exactly.

So not directly diagnostic but a great tool for us to use along the way. And I do. Like. Looking. At. Those values and getting a baseline and especially prevention.

Patients. And for people maybe in their 30s to start testing every six months or every year and watching that pattern over time. Yeah, I think this is an important conversation because like you, I've seen patients just this week I had a patient who, you know, she left the office distraught, and she sent an email back after we had gone through her labs and we talked about it.

But it is one of these life changing diagnoses, particularly when you have, like she did, this experience of watching your mom or dad suffer, right? Is that what's happening to me now?

And the stress around that is, is is profound. So she said she called her sister and she was crying. And I think kind of like getting a cancer diagnosis.

As soon as you see that those markers are abnormal and you know that they're associated with Alzheimer's, you kind of don't hear anything else in that visit.

And that's part of why I think I want to have this conversation here. It's because I want anyone listening. When you

see those numbers, they're an invitation to do the work exactly right. They are indicative of a neurodegenerative process, and that is terrifying.

And they aren't indicative of Alzheimer's dementia right. They are indicative of Alzheimer's disease in the very earliest stages. And a lot of people are familiar with the language.

And they've heard on TikTok or Instagram or wherever we get our medical news these days. We've heard that Alzheimer's disease starts decades before symptoms start.

That is what we're talking about. We're talking about these earliest signs that something is pathological in the brain. And so it doesn't mean that you have dementia.

It doesn't mean that you are in the next, you know, you're going to be dependent on everyone around you and become a burden to your family. It doesn't mean that what it means is it.

Now is a great time to get started with everything that we've discussed today. Exactly. Now is the time to get the rest of the testing that will help us understand why there's a neurodegenerative process happening, so that we can turn that around and get the brain into that rest, digest, heal, connect, regenerate mode out of the fight, flight, freeze, defend, attack mode.

And that is a process that does take work. But whenever you see those numbers that are abnormal, that is the invitation saying come, let's do, let's go through this process.

Right then with April even as well. Yeah, it is another one that can be really scared scary. And I remember patients ten, even ten years ago, they would say, well, why would I get that?

That is just going to keep me from sleeping at night, which is going to make it harder for my brain to, you know, be healthy. And I think now, as you mentioned, for you, it's it's empowering.

Early Detection, Biomarkers, and Prevention

It gives us this opportunity to make better decisions for our brain earlier on so we can prevent that pathophysiological process from happening right now.

I hope that. Is something that will be available to everybody starting at 30. Same. Yeah. The more we know, the earlier, the better decisions we can make.

And you just. Reduce your risk of everything else. Right? I think the side effect of this process is better health in general. You mentioned reversing diabetes and addressing vascular health.

Decreasing inflammation all across the board. Yeah. You know very I'm curious what you think of that. You mentioned weight loss, decreasing information.

What are your thoughts on using GLP ones and things like Ozempic or zap bound and gyro? Semaglutide is appetite. These are some of those, those GLP ones that are out there that many people are taking in.

Many people are on and using. What do you see their role being in the Alzheimer's and dementia space? I see a big role there, especially because. We know that Alzheimer's is considered type three diabetes and the rates in this country of metabolic.

Disease are sky high. So I do see. That for both prevention and part of the treatment plan, they can be very. Useful. In either reversing. Metabolic disease diabetes.

It can. They also help significantly with cholesterol and heart disease risk. They are very anti-inflammatory. So getting people out of that risk, that metabolic risk itself is huge for the brain.

But. There's also. Studies that are now showing how it can decrease neuroinflammation. So we're seeing. It can help with mood. It can actually help with cognition.

You know, part of that is you're decreasing. The the Glasgow toxicity. The blood sugar component. It has to be done right though. Right. Like with. Any medicine with any.

Supplement and food choices, we want to be mindful that we're doing it right. We're doing it right for that patient, that individual. So I do worry. About especially.

In the older population, significant weight loss. We want to make sure that they're getting enough caloric intake, taking something like creatine. To help with. Muscle.

Maintenance, exercising and really pushing the muscle. So you're. Preventing muscle loss and encouraging more fat. Loss. And then, you know. Making sure they don't become frail ultimately.

But I do see a big space. For that if it's done correctly at the right dose. With the help of a. Provider. You also want to make sure that. The. Side effects are being minimized.

So we talked about weight loss. But the GI side effects. I mean part of what we do is we're trying to detoxify people and, get toxins out and make sure they're having good gut health.

We know that the mechanism of these drugs are to slow gut motility. So I don't want to see someone then end up with constipation or have, you know, any gallbladder issues or pancreatitis as a result of them.

And a lot of that. Goes back to the dose. So if. Done carefully with a doctor, I think they can be. Very helpful. Yeah, they're an effective tool. And peptides in general are an effective tool.

And they're they're peptides that stand out to you for use. Yes. Our population. Absolutely. So the GP's BBC 157 has really gone up on my lists. More recently because. It's so safe.

And we're finding that, you know, you can take it early. And it can. Help so much with the gut and improving. Gut motility and. Decreasing gut inflammation.

But also with neuroinflammation, I'm seeing people are like, oh, I have less brain fog. After starting this. I can think clearer. So there's so. Many benefits and it helps with rebuilding collagen and joint in a lot of those issues we see in older populations.

As well. Yeah. Any others that stand out to you. Any specific neuro makes synaptic genic neurogenic kind of peptides on your radar. I feel. Like we just had this. Conversation with a patient the other day.

And and I don't really recommend those. Yeah, I don't really either. There's none that really stand out. There's me. Yeah it is. I haven't been impressed with any that are directly for neurogenesis.

I think the indirect effects of something like BPC 157 have shown improvement in brain health and cognition, but indirectly so the other ones that are supposed to be more for the brain, like cerebral Asian, I don't get huge benefit in my patient population from those.

And because they're more costly, harder to get. I don't. Typically recommend. Them. Yeah. Same with Sealink C-Max. So people may have seen those out there and then they're asking about them.

And my clinical experience with them is that they're spider like ho hum like hum. Yeah, maybe a little bit. But that's a. Little bit in the beginning they will increase, but it's not usually something that's sustainable.

And then there are also I think the sleep peptides. So we could have a whole conversation about sleep. But sleep peptides are another place where you see that way.

I wish there was a sleep peptide that really worked. I agree there's just not when like the when for weight loss. Man, those work, the ones for gut healing, they're amazing.

So if those are your problems, there's a peptide for you. I agree with some of these other issues. There's not yeah I guess, but what about for sleep.

You know sleep is so crucial. You mentioned sleep apnea. Good sleep is so crucial for the brain. So how when people hear that and they're like, yeah, but I can't.

What do you recommend? How do you talk them through that? How do you help them get achieve good sleep so they can optimize brain health? That's a great topic because of how important it is for the brain.

Absolutely. Number one is I'll go through what is your sleep routine. So when are you going to bed? What are you doing before bed? Do you have proper sleep hygiene to cool enough as a dark enough?

Are you winding down? You're not watching. Some. Really intense movie right before bed. And then when are you getting up? When you're going to bed? Waking up around the same time.

Are you giving yourself enough time in bed? That was my issue. I was not giving myself. I was doing all the. Things right, all the things. But the one thing I wasn't doing was getting enough time in bed to get proper sleep.

And once I did that, I shifted my bed time 30 minutes earlier, getting beautiful scores in my aura ring. Now. Yeah. So we'll go through those sleep. Hygiene, see if we can optimize that routine in some way, get them winding down before bed, and then consistency is really nice and ideally plenty of time before midnight.

So they can get into that deep sleep. So I really like to see. Up. Before ten if possible and then from there treatments.

GLP-1s, Peptides, and Sleep Strategies

So rolling out sleep apnea, making sure that we're addressing sleep apnea if that is diagnosed progesterone for women. So hormone replacement therapy if appropriate can.

That's so I think top of the list. Probably game changing. And I'm we're not even there yet. Just so everybody knows like I don't take progestin I don't either.

It's because my patients tell me how amazing it is that I get so emphatic about telling people about the benefits. I mean, it is life changing for women who haven't slept since perimenopause, menopause, some women who haven't slept because they were having kids still, I mean, it is just game changing to get good restful sleep and progesterone does it so often now.

Some people can't tolerate it for one reason or another. But if you can oh my goodness. It's significant. And it's so common that we see you go through menopause and then all of a sudden you can't sleep.

So it makes sense. That there's a hormonal component there. So progesterone is probably the one that can make the. Biggest difference. In women, who tend to have more sleep issues than men.

And magnesium, different forms of magnesium, magnesium. Gleason eight is really coming for the nervous system. Magnesium three and eight. Great for the brain.

Both of I love. Those individually or in combination to help with sleep. I love, relax, Max, which has magnesium three and eight in it, along with some things to help with Gaba production, to help with calming and, restful sleep at night.

And inositol. Yeah. Which reduces the, production of amyloid plaques. Exactly. And, you know, I like inositol just

across the board because it can help with insulin sensitivity.

So it's decreasing blood sugar. It's decreasing amyloid plaque accumulation. It's shown to be anti-inflammatory I love innocent. It's sweet. Sweet. It's good.

I it's my hack I sweet. In my yogurts and my. Cottage. Cheese or anything that I don't want to put like a sweetener in. If I hear. Yeah I'll add the an acetone to it.

What about here? I don't added there because of the consistency, but if something like a yogurt bowl that already has a different consistency. You get chia pudding or oatmeal or something.

Yeah. Yeah. Okay. So magnesium, progesterone, sometimes a little bit of melatonin, like point three, 2.5mg can be helpful, especially if you're having difficulty with falling asleep, because we do see that some people have a disrupted circadian rhythm.

So their cortisol can be jacked up at night. That stress hormone and inhibiting the melatonin production naturally from, the pituitary gland. So about.32.

five milligrams might help with staying asleep. At some five HTP or tryptophan might be nice as well for helping with stay asleep. I love. L-theanine.

Athenians. Wonderful for staying asleep. I found that, the things that are very calming to our nervous system. So the magnesium, Gaba, valerian, passionflower, those things to help calm the nervous system, prevent cortisol spikes can be great.

Fast, real. I was I mean, I can't believe I almost forgot that one. That one literally breaks down cortisol. So that's often what's happening when we're waking up through the night is we're having these small cortisol surges.

Our stress hormone is going through the night, whether that's from what we're carrying through the day or blue light, something that's telling our body to release.

And so that fast strain helps to break down the cortisol so that you're not getting that same spike. So I that's. Another one actually that people. Are like, wow, that saved my life.

I can now sleep through the. Like the night with. This. That's a big one. Any other big takeaways like from the like looking forward kind of tech space.

I know we talk sometimes about red light and tornadoes and cold hygiene and like the biohacking tech space are there good takeaways for population either at risk for or experiencing some dementia?

I love. Sauna therapy. I think because we see the literature showing that it can increase. Heat. Shock proteins, which can decrease amyloid in the brain, decrease inflammation, protect the brain.

But it's also detoxifying. So there's there's studies. That show, right, that. You have a total. Decrease in all cause mortality. The more that you can sauna.

And that's one of our major organs of elimination is through our skin, through our sweat. So if we're. Increasing these great things for our brain about a decreasing the toxic load, that can have an effect later on, I just think, why not?

Feels good. It's good for your nervous system. It's a great addition to your workout routine. If possible. But about red light therapy. I also love red light.

I think of that battery light. I always I'm like. Imagining a Sims character with like a battery pack over someone's head. And how can we increase that?

What can we do to really juice that up? So energetics. So anything that's going to pump more blood, pump more oxygen to the brain and red light can do that.

Red light directly can stimulate energy within the mitochondria of brain cells. So cool. It's amazing. And we had that one patient, who he was affected by the Palisades fires.

And fortunately he didn't lose his house, thank goodness. But there was a lot of smoke damage, chemical toxicity. So he had to get out of there. And he was telling us how he went to Mexico.

He didn't take much with him. He didn't take supplements. He was eating chips and guacamole. He was not on the diet. And he but he did take the red light. Yes.

And we saw some pretty incredible changes. Oh my goodness. He did you know, he was good about meditating and doing those other things. Not great about getting into ketosis.

But he was so. Consistent with the red light. And he had been on the protocol program for like a year and a half or so, maybe two years, and he was getting some benefits, but there was this like it was so crazy to see that even in 2025, after going to Mexico and falling off a lot of it with the red light.

He his brain. Grew. It was crazy. He's been on the imaging. We saw that his brain grew in size there. The before and afters of the blood perfusion. Was the most significant to see that.

I mean, I would still pinch myself. Oh, it was to experience that, to see within two years. I mean, he was under significant stress. With the Palisades.

Fire and it wasn't perfect. But this one thing. Helped significantly with blood flow and growth of his brain.

Red Light, Sauna, and Real-World Results

Yeah, I think with what we do, because we're doing so much at the same time, it's hard to say, okay, this one thing right makes this that, you know, creates this big improvement.

But with him, he sort of like reduced the variables and just did that. And it was such a reminder to me how powerful red light therapy can be. And we've had other patients who say, oh, like in the first month, her energy was better.

I know that she was improving. And I think for most of us, especially if we aren't super progressed, you don't notice it day to day. But after 30 days of doing it, it's like, yeah, yeah, something was different compared to a month ago.

Exactly. I often have patients ask me, well, what would you choose? You know, if I could choose between this and this red light is. Easy because you don't have to do it.

It's easy. If you're passive. You can wear it as you're washing the dishes or meditating or laying down. You don't have to be doing anything. Yeah. So you can. Do it every day.

I wear my red like these mask every day and I love it. That's great. So it's easy. Yeah. It's just it's easy. It's passive. It's easy. The downside is it's expensive, right?

They're expensive. But if you can get that economy of scale of sharing between a few people, like I have a mother daughter I saw yesterday and she was like, okay, we're going to get it because mom's living with me now.

My husband can use it, I can use it. I'm going to put it on my son. He has anxiety. And it's like when everybody in the household can start using it. That's it seems like it makes sense. Exactly.

Or if you're local, come to Salisbury and use every gym, right? You can find anything else you want to share with our listeners. I would love to talk.

About my one patient who, you know, this individual. He's in his 70s and. He. Is similar to the patient we were just describing. Had these things. Going against him.

Right. Like he was in the Palisades Fire. But he was within the time we had been working together, diagnosed with inflammatory bowel disease, was having significant GI symptoms where he was losing weight, he was really unwell, wasn't able to keep any food down, and he still increased his Moca from a 19 to a 20 to within five months, doing all the other things.

So things are not going to look perfect. And you're not going to be able to do everything, but when you can still put the effort into things like he was still doing bread, that he was still taking his supplements and reducing his homocysteine and increasing his omegas and trying to eat, as you know best in that keto direction.

And he still improved. His cognitive, his. Cognition. Yeah. So good reminders to. Yes. Thank you for joining us to listen to this podcast. And hopefully you can enjoy it with someone, maybe chat about it, play some cards, do something to go for a run on the beach with a dog guru.

Something that you should find joy from. Any other final thoughts to share with our listeners? I'm just so grateful. I'm so grateful for. The people in our community, the people that we get.

We're lucky enough to come into our office, the people that believe in this and that are willing to have the courage to do this. It's not easy, but it can change lives.

It's never going to be perfect. You're never going to do everything right. Things are going to come up. Life is going to happen. We're still aging, but you can get the benefits of this program when you commit to it, and you do as much as possible, right?

Rachel, it's. Such a. Pleasure to have you here every day. Thank you. But especially here on the podcast, to share all you've learned and how we are learning together.

And helping you answer. Thank you. Thank you so much and such a pleasure and honor to be. Thank you so much for listening to the Think Well Agewell podcast.

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