

3 Tips to Heal Your Brain After Stroke - Dr. Nicholas Schmidlkofer

Dr. Nicholas Schmidlkofer is a licensed chiropractor and a Functional Neurology practitioner who supports people to heal their brains from many conditions including stroke.

Neurologic Wellness Institute

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Highlights:

01:16 Introduction - Dr. Nicholas Schmidlkofer

04:48 Functional Neurology

12:52 What Is Brain Inflammation?

17:31 The Autonomic Nervous System

22:41 Tip #1 Proper Breathing

36:15 The Blood-brain Barrier

44:04 2. Tip #2 Getting Enough Sleep

52:40 Alcohol And Cannabis

1:03:38 Tip #3 The Carnivore Diet

1:17:06 Meat Over Vegetables

Transcription:

Dr. Nick Schmidlkofer 0:00

Any change to a diet from like the standard American diet or from processed food is a good change, getting rid of processed sugar, processed carbs, and processed oils.

Dr. Nick Schmidlkofer 0:12

Which is mostly in processed foods and just sticking to meat, fruits and vegetables. I mean, if you can do that in life, like you're gonna be way better off than 80% to 90% of the people out there.

Intro 0:28

This is the recovery after stroke podcast. With Bill Gasiamis, helping you navigate recovery after stroke.

Bill Gasiamis 0:41

Hello, and welcome to episode 221 of the recovery after stroke podcast. To learn more about my guests, including links to their social media, and other pages and to download a full transcript of the entire interview. Please go to recoveryafterstroke.com/episodes.

Bill Gasiamis 0:57

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Introduction - Dr. Nicholas Schmidlkofer



Bill Gasiamis 1:16

Sharing the show with family and friends on social media will make it possible for people who may need this type of content to find it easier. And that may make a massive difference to someone that is on the road to recovery after their own experience with stroke.

Bill Gasiamis 1:29

My guest today is Dr. Nicholas Schmidlkofer, who is a licensed chiropractor and a

functional neurology practitioner who supports people to overcome neurological conditions caused by concussions as well as dysautonomia, ADHD, dizziness, Parkinson's disease, and headaches just to mention a few.

Bill Gasiamis 1:49

This was a detailed episode and requires multiple listens to grasp some of the concepts. And it will also help if you have an open mind as some of the topics we discussed are a little bit counterintuitive. Dr. Nick Schmidlkofer welcome to the podcast.

Dr. Nick Schmidlkofer 2:04

Thanks, Bill. Happy to be here.

Bill Gasiamis 2:06

Happy to have you here. Man. Thank you so much for agreeing to be on the show. One of the reasons why I asked you to be on the show is because you're a doctor, you're young-ish, you're probably speaking the language that people need to hear from doctors in.

Bill Gasiamis 2:25

And that is a rare thing, especially when it's very difficult to have conversations with doctors about things that are serious, and that are explained in a way which are easy for patients, especially stroke recovery patients to understand in that acute phase when they're doing really it hard. So before we get into the podcast, proper Tamia, a little bit about you and what you do for a living.

Dr. Nick Schmidlkofer 2:58

Yeah, so I'm a Doctor of Chiropractic by trade. So my degree was in chiropractic. And then after that, I got a diplomate by the American chiropractic neurology board. So basically, it's a 300 hour program where we do 300 hour's worth of coursework.

Dr. Nick Schmidlkofer 3:21

And then we do a big test and practical afterwards. And that just basically gives me more knowledge on the brain, the nervous system, a little bit of nutrition, and metabolic and everything that has to do with our brain and body. And so the last four years I've been practicing in Chicago, at the neurologic wellness Institute.

Dr. Nick Schmidlkofer 3:44

And what we do is we treat predominantly brain injury cases. So mostly that's concussion or like severe traumatic brain injury, mild traumatic brain injury, either one of those, but we do also get a lot of stroke patients or I should say post-stroke patients.

Dr. Nick Schmidlkofer 4:04

And then we get a lot of variety of other things. So those others would be anything from dysautonomia, or POTS, which is Postural Orthostatic Tachycardia Syndrome. We see patients with neurodegeneration, Alzheimer's, Parkinson's, we see patients with dizziness or vertigo.

Dr. Nick Schmidlkofer 4:23

And then of course, all those patients I talked with before like concussions or post-stroke patients can have dizziness, can have vertigo, can have dysautonomia, they get all those things they can have headaches and migraines. So that's one thing that's cool with the brain is there are different areas in the brain and they can all cause similar mythology so you kinda have to piece out where is the issue.

Heal Your Brain With Functional Neurology



Dr. Nick Schmidlkofer 4:48

So that's mostly what we treat here we have three clinics and obviously, I don't want to really advertise or anything I really just want to be really clear like, we have three clinics, and we have a lot of people doing great things in our field, not only in our clinics, but around the US, in Australia, in Europe, we have a lot of people that want to do things with functional neurology.

Dr. Nick Schmidlkofer 5:17

And functional neurology is really just looking at the brain in a way that is based on function. So we have multiple areas in the brain, they all talk to each other in different ways. And so we can look at an individual, we can look at their eye movements, we can look at their facial tone, we can look at their posture, we can look at how they move an arm or leg and kind of pinpoint areas in the brain that might not be working as well.

Dr. Nick Schmidlkofer 5:44

And then we can work on them by using the areas that are working better. And normally, that requires less inflammation, that requires a good metabolic compromise that requires good nutrition, like all those things, as a foundation to then get those things moving forward faster.

Dr. Nick Schmidlkofer 6:05

And that's kind of what that's functional neurology is most of the time when people have a stroke, they're going to get an MRI, they might see little lesions on the MRI that are turned structural as we can see them. But that might not be the only area that is of concern.

Dr. Nick Schmidlkofer 6:23

There might be other functional areas that are involved. On the other hand concussions, you don't see anything on an MRI. So there's no structural issue. It's all functional. And so that's how we look at the brain by function, and we treat it by function.

Bill Gasiamis 6:37

Yeah. I love what you said, Well, firstly, I like the idea that you're a chiropractor that understands the way the body is put together, all the little bits and pieces, how they connect to each other, how one thing saying the neck affects the leg, or the thing in the leg affects the neck.

Bill Gasiamis 6:56

And I like that chiropractors understand the injured toe, how that affects the gait, how that affects the muscles on the other side of the body, and how that can cause problems in the spine. And that can cause a headache, for example, or something else.

Bill Gasiamis 7:15

I love that there's this knowledge of understanding from well, the problems in the neck, but I wonder if it starts somewhere else, and dealing with the source of the issue rather than where the symptoms appearing. And then that takes me into, functional medicine, which is a similar approach functional medicine, doctors, practitioners, will talk about the cause, what's the underlying cause of your symptom, and let's not treat the symptom, let's solve the problem at the cause.

Bill Gasiamis 7:51

And then you're talking about functional neurology. And that's, again, like these great terms and ideas of actually going into the neurological space in the person. And then working out from there. Backwards and dealing with the source of the issue rather than for example, this might be a bad example, but the memory loss or the fatigue or whatever, okay, you're dealing with fatigue, well rest more or sleep more or whatever.

Bill Gasiamis 8:26

But there's really an underlying issue. And that was what I noticed for me. So my brief history so we can make it part of our conversations together was that in 2012, I had a brain hemorrhage caused by an arteriovenous malformation, a faulty blood vessel that bled.

Bill Gasiamis 8:46

And then six weeks later, I had another bleed from the same blood vessel that was more dramatic, far more blood, and a lot more deficits that I experienced, I experienced a lot more losses above my function. And then fast forward about two and a half years later, I had another bleed from the same blood vessel which eventually had to be removed through surgery.

Bill Gasiamis 9:11

And in that time, in that two and a half years between the first bleed and surgery, I experienced fatigue, I experienced the memory loss. I didn't know my name, at one point, couldn't recognize my wife, couldn't keep time, couldn't make my appointments, couldn't drive, couldn't work.

Bill Gasiamis 9:30

And I had the presence of mind of knowing that whatever was happening to me that I could potentially be contributing to it and making it worse. And I'm not sure where that thought came from but that one thought made me look into what can I

do to support the healing of my brain and the areas that aren't affected by the blood directly but are affected nonetheless.

Bill Gasiamis 9:56

And the only thing that I could come up with which started this entire thing later on, which became the podcast. And the only thing that I could come up with was, they were giving me a drug called dexamethasone to deal with the inflammation at the source of the bleed, at the side of the bleed, and I wanted to get off dexamethasone, because it was a terrible steroid drug to be on.

Bill Gasiamis 10:23

It was the symptoms were just unbelievable what it was causing to me, including insomnia, and the feeling of bugs crawling up my arms and hallucinations, weight gain, you name it. And I thought, Is there any way that I could support my brain to become a less inflamed?

Bill Gasiamis 10:48

And if there is, what is it and work and can I do it on my own? And immediately the Google searches that I did came up with nutrition. And it was so easy, because I could do that from home. And I was spending a lot of time at home and all I needed to do was instead of do something, I had to stop doing something which all that meant was unable to stop, for example, drinking alcohol, drinking sodas with, you know, high amounts of sugar in them, stopping the consumption of gluten, decreasing the consumption of caffeine and decreasing the consumption of dairy.

Bill Gasiamis 11:27

And I noticed that even though I had all this stuff going on in my head, I was still able to have a lot of control over how I felt. Because when I chose to eat bread you know, once a month or once a week or whenever I felt like it, I noticed how I felt soon after. And it was debilitating fatigue, bloatedness inability to be myself again.

Bill Gasiamis 11:59

And I started noticing that I was doing that to myself more and more every time I ate. And then that went away, Nick, that just went away and the only thing I was dealing with was what the blood in my head was doing to me. I wasn't dealing with what I was also doing to me.

Bill Gasiamis 12:21

That's why when I saw your Instagram, I thought, well, I've got to get in touch with this guy, because you're talking the language that I don't know how to speak to the people listening to this podcast, who will really benefit from it. So I want to touch on less inflammation. That's one of the first things you said, tell me about inflammation, what it is and what it does. And why it occurs when somebody has a brain injury in the acute phase. And then why it kind of hangs around.

Dr. Nick Schmidlkofer 12:51

Of course. So the first thing with the acute inflammation is so an ischemic stroke, hemorrhagic stroke, either one is going to cause inflammation, it's basically a traumatic brain injury without the hit to the head. And so let's just talk about an ischemic stroke, that's just basically we, you know, squeeze off a blood vessel, there is no oxygen getting into the tissue that's supplying that the blood vessels supposed to be supplying.

What Is Brain Inflammation? - Dr. Nick Schmidlkofer

Dr. Nick Schmidlkofer 12:51

And so therefore, the brain is not getting oxygen, if the brain is not getting oxygen, we need oxygen to live, like how many people can hold their breath for more than five minutes? I mean, I can't hold my breath for more than a minute.

Dr. Nick Schmidlkofer 13:18

Those people are crazy, right? So but if the brain is not getting oxygen, the brain uses oxygen to make ATP. I know you had Dr. Clark on, I listened to him and he's a great guy. And we've learned a lot from him. But with ATP is an energy currency in the cell.

Dr. Nick Schmidlkofer 14:05

So basically, just how we use money to buy things while the cell makes ATP from our energy sources to then use it to produce functions in the cell. And one of those main functions that are super important for brain cells or neurons are going to be to keep the electrical potential balanced.

Dr. Nick Schmidlkofer 14:27

That means we have like electrolytes, right? sodium, potassium, magnesium,

calcium, those need to be in their separate areas, which means potassium needs to be inside the cell, sodium needs to be out. And if we don't have enough oxygen to make ATP, we have a specific pump that's constantly working against the gradient to get sodium out, potassium in the cell.

Dr. Nick Schmidlkofer 14:52

And if we don't have that, now all sudden that threshold for the neuron goes down. Now rather than you might need a really big push to get the neuron to fire, now, it's just like a little tap, it's kind of like when somebody has a dog, when all you have to do is kind of tap on the door, and they start barking at you, right?

Dr. Nick Schmidlkofer 15:18

Kind of like that, right? I mean, versus someone doesn't have a dog, you have to kind of bang, bang, bang to get their attention. So now that lower threshold, that little tap means that your brain is sending signals when it shouldn't be.

Dr. Nick Schmidlkofer 15:32

And when the brain is sending signals when it shouldn't be, then it kind of gets out of control, and it leads to those neurons start to die, they start to undergo these different sides of processes that cause them to die. And when they die, they release products that cause more inflammation, basically.

Dr. Nick Schmidlkofer 15:53

And so you have other cells in the area that are trying to reduce the damage, you have these inflammatory cells called microglia, that are trying to reduce the damage, but they cause more inflammation, you have the blood flow from the other areas, that are getting blood flow.

Dr. Nick Schmidlkofer 16:09

More immune cells are going they're causing more inflammation. And so that's like the acute process, that acute process is generally good, we need to kind of control that and have that happen to kind of control the overall damage.

Dr. Nick Schmidlkofer 16:25

The problem is, is when it kind of last and it keeps going is then you can get this secondary injury where it's like secondary inflammation causing more problems. And then on top of it, so your brain has a skull, right. And so an inflammation gets there, just like when you have swelling in your hand, after you injure your wrist or something.

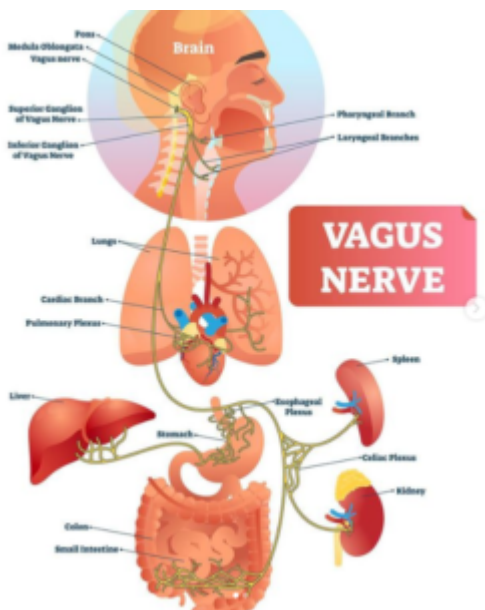
Dr. Nick Schmidlkofer 16:48

You get swelling in your brain that causes pressure and pressure build up. Well, you have arteries that go to your brain, you have veins that come away. And those veins need to release or kind of get rid of those toxins. And so when just like any cell is dying, there's waste that has been produced, there's toxins, there's the inflammatory molecules that went up there, cytokines to help with the inflammation.

Dr. Nick Schmidlkofer 17:13

Those signaling molecules, they need to also be drained. And if they're not being drained properly, because there's damage to the veins, there's damage to the lymphatic system. So the lymphatic system also deals with drainage, then that inflammation just kind of sticks around.

The Autonomic Nervous System - Dr. Nick Schmidlkofer



Dr. Nick Schmidlkofer 17:31

Then on top of it, you add in the autonomic nervous system. So the autonomic nervous system is like our sympathetic, which is our fight or flight nervous system, kind of like gotta run away from a bear versus the rest and digest or parasympathetic system.

Dr. Nick Schmidlkofer 17:48

And when you have a brain injury or any injury, your fight or flight system has to be up and elevated, because it has to try to take care and keep you alive. The

problem is the brain controls that. And so there are lots of areas in your brain that control that mostly it's going to be like the midline structures in the brainstem.

Dr. Nick Schmidlkofer 18:11

Brainstem, and then a little bit higher up in like the basal ganglia. Those midline structures, there are a lot of connections that are crossing through that midline. So just about any head injury, any stroke is going to affect the autonomic nervous system.

Dr. Nick Schmidlkofer 18:28

And the autonomic nervous system, besides controlling that fight or flight rest and digest the rest and digest part that parasympathetic is going to have an effect on the gut. And so you have a nerve called the vagus nerve that has to run down goes to all of it's my favorite nerve, by the way, the wandering nerve, right?

Dr. Nick Schmidlkofer 18:50

And vagus means wandering and goes to the heart in the lungs, and it goes to most of your digestive organs, most of your gut and colon. And the greatest thing about it is most of it's actually sensory. So most of it is picking up 80% of it is picking up what's actually coming from the gut.

Dr. Nick Schmidlkofer 19:09

And so if before the stroke before the head injury, you had inflammation, you had dysbiosis, your microbiome was off, you weren't eating healthy. Well, your vagus nerve was telling your brain that your brain was figuring it out and sending signals back down, that it has like this anti-inflammatory reflex to kind of like calm it.

Dr. Nick Schmidlkofer 19:28

Well now with the brain injury, you can't do that. And so the signals are coming up the brain and gut are disconnected. And that is going to perpetuate the inflammation. Now all sudden, a leaky brain leads to a leaky gut because damage to the brain causes this blood brain barrier that helps to protect it causes to be leaky. Now you have a leaky gut as well.

Dr. Nick Schmidlkofer 19:52

Microbes are getting in toxins from your food and pesticides from your food are getting in. It's just not a necessarily a great scenario. And so once that acute inflammation settles, then you're left with, Okay, do you have a good working

autonomic nervous system.

Dr. Nick Schmidlkofer 20:08

And if you do great, you might have a couple other issues. If you don't, well, then you're going to have this chronic inflammation going. And especially if you're not supporting it with the proper diet, proper nutrition, or even lifestyle factors, like just stress and sleep.

Dr. Nick Schmidlkofer 20:24

I talked about the lymphatic system and draining toxins. Sleep is the most important thing for draining toxins, you have to get to your slow wave sleep in order to drain those toxins at night. And if you're not getting into that, which is also a brainstem mediated midline structure thing, then you're not actually going to get rid of that inflammation.

Bill Gasiamis 20:45

Well, that's a lot to unpack. Let's unpack it. All right, so let's talk about the autonomic nervous system. So for people listening and watching who are hearing for the first time, this is the way I understand the autonomic nervous system. It's the part of the nervous system that makes things work, which we then have to think about, like our heartbeat, like I need to go to the toilet, like where our eyes go.

Bill Gasiamis 21:10

All those things like the way our tongue moves, all those things that are related to automatically happening, that things that happen that we don't have to think about. That's a really good system to have in place. And the autonomic nervous system can be messed up, it can be interfered with by all the things that Dr. Nick spoke about all of the stuff regarding inflammation.

Bill Gasiamis 21:35

Because what it can do is interfere with the signals coming from the brain and the gut as to how it should be operating. And when it's receiving signals that are not optimal, or only half signals because there's interruptions in that process, or because things aren't operating properly because of inflammation, then it kind of goes a little bit off whack.

Bill Gasiamis 22:00

It's kind of like an out of tune car that is kind of running and kind of gets you to

where you want to go. But you can tell it just doesn't feel right. And it needs to be retuned and re serviced or the oil change or something like that. So the autonomic nervous system, it appears to be out of our control, but we can actually take control of it as well.

Bill Gasiamis 22:20

And one of those ways is breathing. And meditation, which you touched on, right. So breathing, basically, when you decide to do a 4 second breath in, and a 4 second breath out. And you're counting to say a metronome or a timer or something like that, you're actually taking control of your autonomic nervous system.

Heal Your Brain Tip #1 Proper Breathing

Bill Gasiamis 22:42

And what you're doing is you're bringing the sympathetic arm, and the parasympathetic arm closer to the middle line, and you're making it more balanced, and you're able to then influence factors like your cortisol levels, your stress, hormones, all of that in a positive way. And that helps to decrease the stress and the inflammation in your body. So that's why meditation and breathing properly is important.

Dr. Nick Schmidlkofer 23:15

That's the first exercise I give every patient is breathing.

Bill Gasiamis 23:19

So tell me about your spin on breathing and what you feel breathing can help accomplish other than, and this is, again, something I want to emphasize because control in stroke seems to be in people, it seems to be lost to the doctors. But here is another way, you could take back a little bit of control in what you're experiencing, simply by choosing a balanced breathing exercise. Nick, tell me about your thoughts on breathing and how important it is.

Dr. Nick Schmidlkofer 23:51

Yeah, So research shows that six breaths a minute is the best to activate the vagus nerve. And so that's 10 seconds per breath. So my suggestion for people is like four to five seconds in five to six seconds out, always through the nose. And again, only into the belly, and maybe a little bit of the chest, right, we're trying to

activate the diaphragm.

Dr. Nick Schmidlkofer 24:16

The diaphragm is properly activated, we breathe into our belly, our kidneys actually move like a mile a day, because they're just going back and forth if we breathe properly, and so that activation, like I said the vagus nerve is 80% sensory.

Dr. Nick Schmidlkofer 24:32

So the activation of breathing properly into your belly and moving your organs is activating your vagus nerve, sending those rest and digest signals, those calming signals, and it can really just kind of settle that autonomic nervous system, like you were discussing.

Dr. Nick Schmidlkofer 24:51

And therefore it can control your heart rate, control your heart rate, decreased stress levels a little bit. Obviously we can't take away stress. We can't take away stressors in the investment but, again, what you just said, having a little bit of control, you can't control too many things in life, you can control your attitude and your effort.

Dr. Nick Schmidlkofer 25:11

And it's kind of like, so if other things around in the environment, I mean, heck, just come back to your breath, have a positive attitude. And just, you know, have a good effortful nice and easy breath in and out through your nose.

Bill Gasiamis 25:23

Let's talk about the nose, why is it important in and out of the nose?

Dr. Nick Schmidlkofer 25:30

Many reasons, the nose humidifies the air, so it has all these little terminations and stuff in it that humidifies the air, so therefore it's gonna be better in the lungs. When you breathe through your mouth, your tongue isn't set properly. And so therefore, when your tongue is not set properly, you're going to have more dehydration, especially breathing out through your mouth.

Dr. Nick Schmidlkofer 25:58

And it can also lead more like sleep apnea stuff. So basically, your palate might fall because you're not breathing properly. When you breathe through your nose,

just everything is working better. A little aside to this, like I mouth tape every night, to make sure that at night, I'm breathing through my nose.

Dr. Nick Schmidlkofer 26:17

And it's amazing how after a month of doing it consistently, like my sleep has never been better. So it's one of those things where breathing through your nose is definitely essential. And a lot of people don't do it, you look at a lot of kids that have maybe like ADHD, or other issues like that, a lot of times they don't know how to breathe through their nose.

Dr. Nick Schmidlkofer 26:37

The other thing with the nose too, is breathing through your nose, your olfactory nerves are directly attached to your limbic system. The limbic system is more of like emotions and memory. And so by breathing through your nose, you're actually getting more oxygenation, more blood flow into those memory centers into your emotional centers, to which can not only calm your emotions, but settle down like anger and aggression and sadness.

Bill Gasiamis 27:03

And this particular suggestion, which I hear a lot of, and especially on episode 19. So anyone who's listening, way back in episode 19, almost 200 episodes ago I interviewed Patrick McEwan, who was a buteyko method, trainer, coach, expert.

Bill Gasiamis 27:25

And the buteyko method is a breathing method. And he talks exactly about those things that you just spoke about. And also, I'm going to say this very crudely, but it it creates the correct chemical balance when you breathe through your nose, the correct chemical balance in the oxygenation of your blood. And then in the expelling of carbon dioxide out of your nose.

Bill Gasiamis 27:56

So when you breathe out of your nose, so it's really, really important to have a good airway, a clear nose passages so that when you're breathing, you're doing all those things. Because it is such a simple simple win again, and you get such massive results by doing it.

Bill Gasiamis 28:19

So breathing through your nose is really important. Something that people could look into is perhaps with their doctors, if they feel like they can't well through the

nose, go get a checked out, see if there's a deviated septum or something and start to attend to those types of things, mouth typing, it might be something that's quite new for people to hear. Explain to me a little bit about what specifically you do with mouth taping, what did you tape it with?

Dr. Nick Schmidlkofer 28:51

First of all, you're right about the deviated septum. Like definitely go get it checked out, a lot of people with deviated septums because they hit their head as children, and it just like grew differently. Also checking for like chronic infections that might be clogging that.

Dr. Nick Schmidlkofer 29:07

But mouth taping so mouth taping I just take like a little bit of the brand is next care, it's like paper tape. So like if you ever go to the hospital and you have an IV and you and they put like a little bit of that paper tape over just to hold the IV needle there.

Dr. Nick Schmidlkofer 29:27

That's kind of what it is. It's not a strong tape. It's very gentle, most gentlest type. I don't put it like across like that. I put it just straight down. And so by putting it straight down, it just keeps the lips sealed and allows you to breathe through your nose the first week or so I woke up with it every middle of the night with it on my hand.

Dr. Nick Schmidlkofer 29:49

My body just said I'm not breathing well through my nose. I'm gonna rip it off. But as you go forward as I went forward, I've heard this by multiple people. You actually create more mucus, if you're breathing properly through your nose, because if you weren't breathing through your nose, now all sudden, you're getting all these, like air molecules into your nose and your nose is like whoa, we're not used to this, we need to defend it with some mucus.

Dr. Nick Schmidlkofer 30:15

And so you might have to blow your nose more for the first week or two. But after that, man, it's like you're clear as day. And then now I don't take it off at all at night. If I am sick ever, I don't wear it, because you know, it's just my nose is too clogged. But it's amazing to be able to wake up and after eight full hours of sleep, not wake up once throughout the night, and just feel like refreshed. And that's

kind of what I feel every morning.

Bill Gasiamis 30:44

Let's talking about the balanced breathing, or the breathing that you mentioned, which was four or five seconds in, five or six seconds out why the longer out breath?

Dr. Nick Schmidlkofer 30:57

So the longer outbreath has been shown to activate the parasympathetic nervous system, a lot of people like to do 4, 5, 6, or 4, 5, 8, where they go in for four, hold for five, and then out for eight. I think that can mess up oxygenation levels a little bit, where you're actually breathing off more carbon dioxide than you're actually producing in your body.

Dr. Nick Schmidlkofer 31:24

Some people do need that. But I'd rather I just want to aggregate a little bit of parasympathetic nervous system that Rest Digest activation, without doing too much stuff, I just go a little bit longer on the out. We don't want people to get over oxygenated or oxygenated can actually cause a little bit of anxiety in some people.

Intro 31:44

If you've had a stroke, and you're in recovery, you'll know what a scary and confusing time it can be, you're likely to have a lot of questions going through your mind. Like how long will it take to recover? Will I actually recover? What things should I avoid? In case I make matters worse, doctors will explain things that obviously, you've never had a stroke before, you probably don't know what questions to ask.

Intro 32:08

If this is you, you may be missing out on doing things that could help speed up your recovery. If you're finding yourself in that situation, stop worrying, and head to recoveryafterstroke.com where you can download a guide that will help you it's called the seven questions to ask your doctor about your stroke.

Intro 32:27

These seven questions are the ones Bill wished he'd asked when he was recovering from a stroke, they'll not only help you better understand your condition. And they'll help you take a more active role in your recovery. Head to

the website now, recoveryafterstroke.com and download the guide. It's free.

Bill Gasiamis 32:46

Yeah, so if we're getting people, by breathing out just that one extra second out, as opposed to in, you actually bring people down into the Rest Digest phase, which is the less activated phase, it's less cortisol running through the system, less heart rate, less blood pressure, all the markers that stroke survivors need to monitor that we don't want elevated actually tend to decrease and that just one extra second out, just does that.

Bill Gasiamis 33:19

It actually allows people to just dip under the line of being a balanced autonomic nervous system to slightly into the rest and digest phase more so so people should notice. By practicing that, that once, twice, or even three times a day, I prefer to do it in the morning when I wake up, middle of the day safe, I'm driving somewhere. And then just before I go to bed at night, and what it does is it actually puts me into those calmer states. So I'll wake up calmer, I go to bed calmer, I sleep better as a result.

Bill Gasiamis 33:55

And then when I'm in the middle of the day, and the traffic is getting to me, or the wrong music's on the radio, I'll just breathe and I'll calm down and it will really help to just deactivate those fight or flight responses, those responses where, you know, sometimes they run haywire and you're not realizing that you're losing your shit. And you're acting like an idiot, which I've done before.

Dr. Nick Schmidlkofer 34:24

I'd recommend when you're driving is usually if you got the seatbelt right by your belly button. And you can just breathe into the seatbelt. And it just like creates a little bit of kind of feedback, proprioceptive feedback to breathe into your belly. And you just breathe in and out through your nose. It's the best time to work on breathing, because it is generally a stressful environment.

Bill Gasiamis 34:44

And if you're thinking that you don't know what the hell we're talking about what type of breathing that is just jump on to YouTube and just Google and search diaphragmatic breathing, breathing through the diaphragm. And you'll see there'll be tons of videos of people showing you exactly how to do that.

Bill Gasiamis 35:00

And it's the way we used to breathe, but for some reason, and it's the way babies will breathe, when you just put them down, you'll see that they'll immediately just breathe in their belly, and their belly will move in and out. But for some reason, adults seem to breathe through their chest, and try to expand their lungs and get more oxygen into the lungs, rather than drop the diaphragm. And, and elongate the lungs I'm not sure why.

Dr. Nick Schmidlkofer 35:26

There's, a few theories. One theory is obviously like vanity, we want to suck in our gut to look good. As we get older. So you think of like, you know, even five year olds, like looking through magazines and seeing people and their models that are just not realistic and they're sucking in.

Dr. Nick Schmidlkofer 35:44

The other theory is, when you start going to school, whether you're like three, four, In preschool or five, kindergarten, and you're sitting so much, sitting is just going to contract your hip flexors more. And then the hip flexors actually have a connection to that diaphragm.

Dr. Nick Schmidlkofer 35:59

And so that can actually turn off the diaphragmatic function. And so people start breathing into their lungs more, or their chest rather than belly. So there's a few theories. I don't know if we know which one's best or which one which.

The Blood-brain Barrier

Bill Gasiamis 36:15

Awesome. Tell me a little bit about the blood-brain barrier. Because all these things are connected, the blood-brain barrier is something that was severed for me when we needed to have brain surgery, right? And as a result of that, I was quite aware of the impact of that, and what that might actually do, and cause.

Bill Gasiamis 36:36

However, there wasn't much I could do to heal it, it had to heal by itself over time. But with me doing all the right things, eating appropriately, minimizing sugars, and minimizing all of those additives in my food. So I became very clean eating at home, cooking most of my meals, etc.

Bill Gasiamis 36:54

But what happened to me was, I had a thyroid condition, where one of my thyroid glands was way too large, it was becoming a problem in my airway. And as a result of that, about 18 months after my brain surgery, I had to have part of my thyroid removed.

Bill Gasiamis 37:15

And when I woke up from surgery, the my left side deficits were far worse than they were when I went into surgery. And I didn't realize until a little while later why that might be. And I feel like perhaps the anesthetic, the general anesthetic that they used to put me under during surgery may have contributed to that at the time where my blood brain barrier was still fragile.

Bill Gasiamis 37:45

And anesthetics meant to penetrate in any way, I'm pretty sure it's meant to penetrate the blood brain barrier and impacted my inflamed, damaged, whatever you want to call them neurons, sensory neurons, and made matters a little bit worse.

Bill Gasiamis 38:02

Now, I think that it's improved since then, because now there's six years beyond that surgery. But I feel like is definitely worse than it was at the beginning. And I didn't learn about the blood-brain barrier until around about that time or after that surgery. And now I'm very aware of why we need an intact one. And I want to know how we can support one, and why we want to support an intact blood-brain barrier.

Dr. Nick Schmidlkofer 38:37

Yeah, so the blood brain barrier is basically is a collection of cells that then have these little extensions that wrap around our blood vessels. And by wrapping around our blood vessels, it prevents bigger molecules from passing. So the smaller molecules like ions, like sodium, and like salt and potassium, can easily pass. But like larger proteins aren't going to pass those inflammatory toxins are not going to pass.

Dr. Nick Schmidlkofer 39:10

Bigger proteins like so glucose or ketone bodies are going to pass really easily for fuel into the brain. But that blood brain barrier those extensions, they're made

from astrocytes. And when you have inflammation, the astrocytes aren't getting enough oxygen to keep up their little holdings in connection.

Bill Gasiamis 39:34

What astrocytes?

Dr. Nick Schmidlkofer 39:35

They're a cell that are in the brain. And I guess the best way to describe them as they are this like star looking cell that have extensions that wrap around the blood vessels, and they wrap around the blood vessels to protect it, and that's what makes the blood-brain barrier.

Dr. Nick Schmidlkofer 39:40

And so if those are damaged now, those extensions are lost. And so now there's no barrier between the blood and the brain. So things can easily pass through. I should note that the blood-brain barrier is not completely all consistent.

Dr. Nick Schmidlkofer 40:09

There are areas that are supposed to not have the moon and blood-brain barrier, because they are areas that are going to sense things faster. So for instance, kind of like when you when you eat something bad, and it's like an instant, like, oh, that's bad, and you get nauseous.

Dr. Nick Schmidlkofer 40:27

So your hypothalamus, a very deep part of the brain, there's an area that is there's no blood-brain barrier there. And because it just needs to be able to sense things very fast. There's a part called the area postrema, which is the vomiting center, there's no blood-brain barrier there.

Dr. Nick Schmidlkofer 40:45

Because if we eat something that we need to throw up, it's boom, it needs to happen. And so what gets into our blood goes in there, it needs to happen, but it's very those small areas. When you have too many areas that are open to the blood-brain barrier then too many toxins get in and again, those toxins aren't able to get out and that's what perpetuates the inflammation.

Dr. Nick Schmidlkofer 41:07

And so astrocytes can be best supported, actually by ketone bodies. So astrocytes, they actually make ketones and they utilize ketones for energy, they utilize

glucose as well. But they utilize ketones for energy. And so that's where like a ketogenic diet or keto bias, I know Dr. Clark talks about beta-hydroxybutyrate, which is just a specific ketone body can be really beneficial for general brain health.

Bill Gasiamis 41:41

Awesome. So the blood-brain barrier again, we can intervene in what gets through simply by what we consume. And that's another form of a little bit of control, supporting the blood-brain barrier to keep out as much toxins as possible during that time where the brain is recovering from this inflammation that was caused by the stroke, or the injury to the brain.

Bill Gasiamis 42:07

And one of the things that you briefly mentioned earlier to bring all of this stuff that we've spoken about already together to bring it together, even better. We spoke about breathing was spoken about the blood brain barrier. We've spoken about the autonomic nervous system, I want to talk about how sleeping is one of the things that actually supports to clear the brain of toxins in that phase that you mentioned in that sleep phase that you mentioned earlier.

Bill Gasiamis 42:38

Why it's important and how all of these things support each other. So the way I understand that is, if you go into bed, you have a five minute meditation, you're doing the four seconds, five seconds in six seconds out breathing, you're supporting yourself to go into a better sleep cycle, when you're going into a better sleep cycle. You have more REM sleep, when you have more REM sleep, you have more ability to detoxify the brain.

Bill Gasiamis 43:04

And when you're sleeping with your mouth taped, and you're breathing better, that's supporting once again that well, oxygenation of the blood, decreasing inflammation it supports cells in their recovery, it supports allowing you to wake up feeling more refreshed, because all those things work together, they don't work individually, they all support each other.

Bill Gasiamis 43:30

So tell me about sleep. And some of the things that it's important. It's important for like what it does to you. Because some people will brag about the fact that

they don't sleep a lot. I don't need to sleep a lot, or some people will tell you that they don't go to sleep until you know three or four in the morning. All these things that you hear about people talk about this sleep, and some of them are not really supportive of healing a brain after a stroke or another injury.

2. Heal Your Brain Tip #2 Getting Enough Sleep



Dr. Nick Schmidlkofer 44:04

Yeah. So we learn in our sleep, right? I mean, in order to consolidate memories, we need to sleep. And those all happen in the deeper stages of sleep, which again, most people sleep on like 90-minute cycles. So it's like you have this like stage one sleep and then it kind of goes down to stage two stage three REM comes back up. And then you might have a little like lucid moment and then come back and you just go through those.

Dr. Nick Schmidlkofer 44:36

So you might get through like four cycles in a night. If you sleep six hours, you should get through four cycles, right? You might get through more. And you want to in though you want to optimize the amount of time that you're in those deeper stages of sleep, because that is what's going to again, get rid of those toxins from the brain but also help with consolidation of memory.

Dr. Nick Schmidlkofer 45:01

Because at the cellular level, there's recovery that's happening. If you think about like, your brain is working all day long, like, you know, if you're sitting on the couch, your brain is still working, right, it's got to do all those autonomic things

that you talked about, versus when you go to the gym and exercise. Yeah, you can exercise your muscles then.

Dr. Nick Schmidlkofer 45:21

But like your brain is always working, it's the one organ that is always getting 20% of your blood flow. And then it might get more during more intense thought or whatever that may be. But at night, your brain is still working. But what's actually working is the those midline structures, the brainstem structures that are working constantly to turn off your big brain.

Dr. Nick Schmidlkofer 45:45

Your big brain is kind of where you have those senses of, I can see something, I see light, I hear a dog barking next door or siren going by because you know, there's, you know, police outside whatever it may be. And those needed to get shut off.

Dr. Nick Schmidlkofer 46:00

So that or like, even the feeling like if you have a partner in bed that rolls over, you don't want to wake up because that partner rolled over, right, you don't want to wake up because they turn the light on, they go to the bathroom. And so the brainstem is working all throughout the night, to turn off or to keep that bigger brain turned off.

Dr. Nick Schmidlkofer 46:19

And that allows for that deeper way of asleep. And that allows that, again, deeper brain limbic system, to memory centers, motions to restore and recover from all of the things that you learned throughout the day, whether you didn't learn anything, I mean, most people learn at least one new thing every day, whether they like it or not.

Dr. Nick Schmidlkofer 46:40

Or you're just basically creating more habits of the days that you're doing, or of throughout the day that you're doing. That's kind of one thing you mentioned about the autonomic nervous system about everything that's more automatic, I would say to one like caveat to that the autonomic nervous system is everything that's automatic for like your organs, things where you're talking about, like your tongue movement, or your eye movement.

Dr. Nick Schmidlkofer 47:05

Those are actually just like learned habits. And like, you know, when you walk into a room, the first thing you need to do is kind of survey the room to see you know, who's there, what might be there, is there a getaway because you know, my fight or flight nervous system is up and if something happens, I might need to jump out a window.

Dr. Nick Schmidtkofer 47:24

So there's just some learned habits that happened like that. And but that makes the brain more efficient. And efficiency is key, especially when recovering from a traumatic brain injury from a stroke. Because you don't want to be using your frontal lobe, which is supposed to be for creativity, for logical reasoning for decision-making. To do every little thing, you should have daily habits.

Dr. Nick Schmidtkofer 47:50

I wake up, I go to the bathroom, I brush my teeth, like those are just things that they just happen because they happen. You shouldn't have to think, Oh, should I brush my teeth now? Or should I go to the bathroom now? No, it just should just happen. And when you have to have extra brainpower slows down decision-making. That's a problem. So I went on that rant, back to sleep.

Bill Gasiamis 48:12

It's a beautiful rant because they're connected. They're all connected.

Dr. Nick Schmidtkofer 48:15

Yeah. And so with sleep is about recovery. And recovery is so important for learning and keeping your day going, and then getting rid of those toxins and proven inflammation. And like I said before, if you don't get it's a, it's a vicious cycle, if you don't get into that deep wave sleep, you don't release the toxins, and therefore, you don't heal and then you don't have a worst day.

Dr. Nick Schmidtkofer 48:39

And then you have don't get a deep way to sleep worse toxins. So that's why supporting your body the best you can with proper diet and lifestyle changes and what you just said, having a good sleep hygiene routine where you can kind of settle your brain get your get your mind in a way that you can decrease that fight or flight nervous system, activate that rest, digest and have a good sleep.

Bill Gasiamis 49:02

Beautiful. I'm gonna emphasize a couple of things. Because you did a beautiful

job, but I want to really actually emphasize it again, that memory is consolidated when we sleep. So if you're somebody who's had a stroke, and memory is an issue, short term or long term, and you're in the phases of recovery, and depending on your injury, that might come a long way or it might not.

Bill Gasiamis 49:25

What you need to know is that memory while you're doing that exercise, remembering at that moment is not the most efficient time to remember to feel like you need to be remembering. So I remember going to my neuro psych assessment, and then they would do all these exercises. It was about a three or four hour assessment when they were trying to work out my cognitive deficits.

Bill Gasiamis 49:50

And they would say to me, I'm going to give you the names of five fruit. And then in an hour or later on, I'm going to ask do about them again. And of course, I remembered some of them, but I didn't remember all of them. And I remember feeling bad at the time about that feeling like I had missed something, and therefore it was no good.

Bill Gasiamis 50:11

And I was struggling with memory, for example. But I didn't understand that memory gets consolidated better during sleep, because that's kind of the most optimal stage for memory to occur, and to be stored. Whereas in the moment, like, right now, if my anxiety is up, and you're making me try and remember, five or 10 things in a row, but I'm anxious, it's less likely that those memories are going to stick.

Bill Gasiamis 50:40

So if we're going into an exercise to remember something, and then we're anxious about remembering, we might be getting in the way of those memories sticking, or getting stored. If we've had a day where we would lack sleep or wake up and we couldn't get back to sleep. And we didn't have a restful sleep, we're going to struggle with storing memories.

Bill Gasiamis 51:02

If we've got other things on our mind, and we're not focused on the task at hand. And we're wondering about all these other things that have to happen during the day, we're not concentrating, we might not remember things. So there's a lot of

reasons why memories won't stick in the moment at the time, and if you can get your head out of telling you that that's good, bad, or something else, that's a really good way to go.

Bill Gasiamis 51:26

Just remember that that's what sleep does, it helps you to consolidate your memory. And you don't really have to do much more about that. If it's something that's important that you need to know, and you have a good night's sleep, it's more likely that that will be there tomorrow, because you had a good night's sleep, and it got stored at the appropriate time.

Bill Gasiamis 51:46

So just hopefully, what that does is give people a little bit of sense of calmness around the fact that they have memory challenges, post-stroke, and that for a lot of those people that there are strategies to help support memory, long-term and short-term memory. Of course, if that part of your brain is severely damaged, and those areas are no longer functioning, then it's understandable that you might have more longer term, short term and long term memory issues.

Dr. Nick Schmidlkofer 52:24

Yes, 100%. Yeah. And if people do I mean, that doesn't mean they can't recover some of that stuff. But it may just take more time. And it may take more effort and actually like hard work, training those areas of their brain as well.

Bill Gasiamis 52:40

Yeah. While we're on the topic of sleep, let's talk about people who need some information about sleep where they can't sleep, they don't know how to sleep, they've lost the ability to sleep, all these things you hear people talk about. And then what they do is they go to alcohol, or cannabis or some other substance to help them apparently go to sleep. Does alcohol and marijuana in particular, actually help people sleep and get a good night's restful sleep and go through the cycles appropriately and reach peak REM sleep?

Dr. Nick Schmidlkofer 53:14

Yeah, no. I mean, they generally because they're depressants, they generally help you get to sleep, which some people do have problems with, and they feel like they need that. But when it comes to restful sleep, no, you don't actually get into the deeper waves of sleep, and the restful sleep when you are using alcohol or

cannabis. It just doesn't happen.

Dr. Nick Schmidlkofer 53:39

And so it's a tough thing because people they'll wake up feeling not really rested, but there at least well at least I got to sleep I didn't. I wasn't you know, churning with my anxiety all night. And so some people like with cannabis, we do recommend like, yeah, if that's what you're going to need right now. That's okay and we're gonna work on other things and other reasons.

Dr. Nick Schmidlkofer 54:01

But my biggest suggestions for falling asleep with people is a couple things. First one is the sleep hygiene and like turning off screens, I mean, ideally, it's probably like an hour or two hours before you go to bed, but most people can't do that. So at least 30 minutes and just getting a routine of brushing your teeth, getting your things ready for the next day.

Dr. Nick Schmidlkofer 54:29

Maybe planning writing down to do things for the next day, getting things off your mind, journaling, whatever you want to do, read a book, but don't do any of that in bed. And when you get in bed, the only thing you're doing is breathing and then go into sleep.

Dr. Nick Schmidlkofer 54:43

You know there's an old adage that's like, the only thing that should happen in bed is sleep and sex and I am a firm believer in that like you shouldn't be doing work in bed you shouldn't be doing schoolwork you shouldn't be studying you shouldn't be anything like that. That is a sanctuary for special mostly sleep.

Dr. Nick Schmidlkofer 55:01

And so yeah, sleep hygiene is huge. But then l'theanine, and magnesium threonate, those are two compounds that are really, really good. Magnesium, especially the threonate form has been shown to help pass the blood brain barrier. Because most magnesium is going to go to the rest of your body when you take it, like magnesium citrate or any of the other forms.

Dr. Nick Schmidlkofer 55:29

But magnesium threonate for some reason, it has this affinity for the nervous system. And so help more magnesium pass the blood-brain barrier. And magnesium does this really cool thing where it's a blocker of a specific channel.

And that channel has to open when we have memory consolidation, basically, in neuroplasticity.

Dr. Nick Schmidtkofer 55:52

And so it's fluid and allows calcium to come in, and then go out. Well, if you don't have enough magnesium, sometimes the magnesium isn't covering that channel. And now too much calcium is going in. And I talked about earlier, all these ions have to be in their proper place, when you have too much calcium going in, that causes this excitotoxic process where the cells are going too much.

Dr. Nick Schmidtkofer 56:15

And it's too active. And that can cause anxiety that can cause Lack of sleep can cause more inflammation. All those things. So that's why I like magnesium before bed, magnesium threonate specifically and l'theanine helps to kind of get your brainwaves in a in a second more settler state, like more alpha wave theta wave tone.

Bill Gasiamis 56:38

Yeah, awesome. There is a book that I've loved that I read about so but I've read a couple of them. But one of them was by a Dr. Guy Meadows, and he wrote this from the sleep school. And they help people and retrain people to learn how to sleep again.

Bill Gasiamis 56:54

Because what they kind of believe is that people basically have lost their process to sleep, they've just become, you know, it's been muddled somewhere, and they haven't been able to get back to their old process of just going back to sleep and sleeping, right? Who knows there are thing's going on in their head, there's lighting issues at home, there's all sorts of things.

Bill Gasiamis 56:54

Now what I like to do to help me get to sleep is I switch off overhead lights, and I just switch on warm, yellow, not yellow, but warm lamps in the house. Excuse me. And in my bedroom, there's literally just some very small, yellow LED lights on a strip that I use that are around my bed that I switch on, they're battery operated, and they just relief release just a really light glow of warmth, kind of orange, light, yellow, orange kind of light.

Bill Gasiamis 57:52

And that's all that you'll get in my bedroom, I very rarely go in there with the light on if it's during sleep time. So that's what I do amongst a whole bunch of other stuff. But they're the two things that I really control because the bright lights on my head really on top of my head really buzzed my brain out, they really sort of get overexcited they make my it makes my eyes hurt.

Bill Gasiamis 58:15

And then from there, like I can't settle down. And I need to sort of just bring down the mood of the environment that I'm in in the room that I'm in just to sort of make it feel a little more kind of dark and cozy. And you know, something along those lines. So if somebody is interested in reading, you can jump on to I imagine every platform and find the sleep book, How To Sleep Well Every Night by Dr. Guy Meadows from The Sleep School. So just a little bit of resources there that people can go to

Dr. Nick Schmidlkofer 58:54

What you're saying there about the light too. So the neurons that go back to your brain to shut off melatonin production, right? Melatonin is what elevates for sleep. So when it's dark out the we're going to have less melatonin production, therefore we can go to sleep.

Dr. Nick Schmidlkofer 59:13

The neurons that are on the bottom of your retina are activating that process nor so overhead lights are coming down hitting the bottom of the retina and going back and activating that and so that's why overhead lights can keep you up at night.

Dr. Nick Schmidlkofer 59:29

So what you just said like having something that's more on the side more ember, less full, like led can really be beneficial. I actually wear a sleep mask as well. Just because I live in Chicago. There's a lot of city lights. I don't have blackout curtains. So I wear a sleep mask. I think that really helps for me too.

Bill Gasiamis 59:47

Yeah. You'd be a sight. Sleep mask, tape over the mouth.

Dr. Nick Schmidlkofer 59:56

Oh, yeah. People have told my wife to get a picture of me but it still haven't happened yet. I fall asleep first too, because I'm out like that.

Bill Gasiamis 1:00:06

Yeah, I usually fall asleep quite well, the thing that interferes with my sleep is the need to get up in the middle of the night and go to the loo. Or if I do wake up with a dry mouth, they're the things that interfere with my sleep. And sometimes after those brakes on in sleep, I might struggle to get back to sleep and then I might be tossing and turning.

Bill Gasiamis 1:00:25

That doesn't happen all the time, I seem to have this cycle as well, which I have a few three or four nights of bad sleep, and then it goes back to normal again. And then two or three weeks later, I have another three or four days of bad sleep again, and then it goes back to normal again. And I don't know why I haven't been able to pinpoint what it is that does that interferes with it.

Bill Gasiamis 1:00:46

I imagined it's got to do with lifestyle factors, right, whatever happened, you know, at work, or whatever happened with the family, you know, something is playing on my mind and stopping from settling me down, or perhaps something that I've done differently in moments of stress. I've eaten slightly differently, or I've stayed up a bit later, there's some things that do interfere that I'm trying to kind of learn, but I don't seem to, I don't seem to be able to find the pattern, but I'm okay with it.

Bill Gasiamis 1:01:14

Because I would say that 85% of my sleep is pretty good. Now, I could talk to you for such a long time, I haven't been able to mention anything yet that you haven't been able to answer. And I feel like if I just keep asking you questions, you're just gonna keep answering them and I love that.

Bill Gasiamis 1:01:30

But we do have to wrap it up at some point. And in order to wrap it up with some real good information for people to understand about nutrition, I want to talk about your posts, specifically on Instagram, and what you describe as your carnivore ish, routine. And by that, by that what I know, your carnivore ish diet means is that what you're doing is the majority of the time you're eating protein, and you're sliding in some vegetables.

Bill Gasiamis 1:02:09

But before that you were doing, I think like a 30 day challenge or a 33 day challenge or something of the carnivore diet. Now, that's gonna mess people's heads, because as soon as I heard about the carnivore diet, I was kind of like, What are you talking about? Like, how can that be possible? I've grown up my entire life. 48 years old, I've been told every single day in my life, that the food pyramid looks like this, you have the all those things in the food pyramid.

Bill Gasiamis 1:02:34

And if you don't eat all those things, you won't be eating a balanced diet. And there's nothing balanced about eating just meat or protein. So can you give us in the next five or 10 minutes a very brief kind of synopsis of diet and how come these supposedly crazy fads of the carnivore diet are starting to move into a positive space where people are looking at them seriously.

Bill Gasiamis 1:03:12

And also seeing massive, physiological positive changes when they do go on a diet that is very high in protein specifically for dealing with traumatic brain injuries and things like that. And then I'll tell you about my experience with diet.

Heal Your Brain Tip #3 The Carnivore Diet



Dr. Nick Schmidlkofer 1:03:38

Let me start first with any change to a diet from like, the standard American diet or from processed food is a good change, right? If anybody listening, like I'm going to talk about some pretty radical, I guess, thinking and ideas, but getting rid of processed sugar, processed carbs, and processed oils, which is mostly in processed foods, and just sticking to meat, fruits and vegetables.

Dr. Nick Schmidlkofer 1:04:06

I mean, if you can do that in life, like you're gonna be way better off than, you know, 80% 90% of the people out there. And so when it comes to diet, I mean, I was the same way as you with the carnivore diet. I heard it I was like, no frickin way like there's no way this can be healthy for you like I was a big fiber guy before.

Dr. Nick Schmidlkofer 1:04:29

Before starting carnivore, I was doing keto often on here and there and I was always like, you gotta have enough fiber, I gotta get enough fiber and think about carbs and all that stuff. And because ketogenic diet, great for the brain, I don't think anybody should be in ketogenic diet long-term, but I do think that it can be great on and off cycling and stuff like that.

Dr. Nick Schmidlkofer 1:04:51

So when I heard about the carnivore diet, I was like, Okay, there's all these things out there that are showing benefits for autoimmunity, traumatic brain injury. You know, I have to try this diet, because I'm not going to recommend it to a patient unless I do it.

Dr. Nick Schmidlkofer 1:05:05

So I think I've done it. I've done a strict carnivore two times, for like 40 days just during Lent. And then ended it kind of going more carnivore-ish and then kind of having what I want, and then afterwards.

Bill Gasiamis 1:05:22

Sorry. I'm laughing because you did it during Lent, which usually they do the opposite.

Dr. Nick Schmidlkofer 1:05:28

Exactly. So, yeah. So Fridays, were tough. Fridays, were just a lot of fish basically. But you know, I do my best. Anyway. So the thing with most people are, most people think that meat is bad, right? Meat either causes cancer or, cardiovascular disease, because of the cholesterol and saturated fat.

Dr. Nick Schmidlkofer 1:05:57

And that's, you know, this podcast could be years long. And so the basic thing is that, to me, and a lot of other people, there are a lot of different camps. And some research has been flawed, and some research is better. And their association

studies association studies don't really take into account bad habits or good habits, other eating lifestyle, or smoking or exercise or anything of that.

Bill Gasiamis 1:06:24

Let me just explain what association studies are Nick. Basically, association studies are, we followed 30 people for one year, who ate red meat. And we saw that at the end of that year, one person had cancer, the other person got diabetes, the other person did this, and the other person had that and all these things.

Bill Gasiamis 1:06:46

However, what they don't do is they don't go and ask that person. Are you smoking? Are you drinking alcohol excessively? Are you exercising? Are you overweight? Are you any of these things, they don't ask people other questions about what else their habits involve. And then what they do is when their focus is so narrow, and then out of the, the 30 people, there's 10% of them, for example, had heart disease at the end of the 100 days, or whatever it is.

Bill Gasiamis 1:07:19

Then what they do is they announce it feels like for me just for the sake of a headline, they announced that we followed this many people for this many days who ate meat and X amount of them at the end of that period of time, had this disease.

Bill Gasiamis 1:07:39

And then what they do is they quickly associate that disease to meat and then they release an article that says something in words to that effect. And that's as good research as me going down the road and seeing how many people drive past in a red car. And how many of them had a crash, and then associating the people who drive red cars crashed more often just because I saw red cars, and I was looking for red cars.

Bill Gasiamis 1:08:07

And then I wanted to report back on how many crashes they had. I mean, it's terrible data. It's terrible research. And it shouldn't be taken seriously. But it has been because most of us lay people don't know, when somebody is releasing a piece of information like that we don't know to look deeper, and question that and understand where it came from. So that's the association study roughly described by me and what Dr. Nick's talking about.

Dr. Nick Schmidlkofer 1:08:36

And you're right, and even if they do look into those other confounding factors, they may list them briefly, but they don't actually put them in the title of the study. So therefore, if people don't read them, then they don't figure it out. So all in all, with a carnivore diet, the diet is basically that you're only eating animal products. So you're eating meat from beef, and lamb and chicken and pork, and fish, all kinds of fish.

Dr. Nick Schmidlkofer 1:09:07

And then you're also eating the way I did it was also eating organ meats. So you're eating liver, kidney, or spleen, which are the most nutrient-dense foods out there. And there was actually just a study in 2022, early in March, that showed that organs are the most nutrient-dense foods out there because they supply good sources of iron and zinc and these micronutrients that most people are deficient in, in lower middle income countries, or groups.

Dr. Nick Schmidlkofer 1:09:38

And so, it's the non-meat drinking bone broth or calcium. You could, I mean, people eat eggshells for calcium, I don't do that. But doing those things, I eat eggs too. And so it's a high protein, high fat diet, or I guess, moderate protein, high fat. And so it basically becomes a ketogenic diet. And what it does is it takes away a lot of the plant toxins that are out there. So everyone thinks, you know, plants are good for me. But no one ever looks at the possible harm that plants can have.

Dr. Nick Schmidlkofer 1:10:16

Plants. They are defenseless, right, they can't move, they can't run away, like animals can. And so the only way that they can defend themselves from other insects or other bugs or other squirrels or rabbits that are trying to eat them, is by making defense chemicals. And those defense chemicals are called phytonutrients. everyone that hears that term phytonutrients are like, "Oh, phytonutrients, there are nutrients for us, they're good for us and made by plants."

Dr. Nick Schmidlkofer 1:10:44

But phyto actually can mean like they're fighting off. And so what those nutrients do is they do activate things in our body, that may be a net good, maybe, they basically help with maybe detox or help to decrease free radicals. But at the same

time, it also may damage our DNA. And by damaging our DNA, it causes that to happen. So the thing is with plants is we have to be wary that not everything we eat doesn't have a side effect, just like a pharmaceutical or a supplement.

Dr. Nick Schmidlkofer 1:11:22

Most pharmaceuticals actually come from plants, they come from molecules and they synthesize them, or they make them synthetically. And they're going to have side effects, just like herbal medicine is going to have side effects just at a less rate or less intensity. So long story short is that we're getting rid of all those plant materials and those plant materials may help with decreasing autoimmunity.

Dr. Nick Schmidlkofer 1:11:47

Because if your body gets in this toxin, and it's like the immune system is already on like this fight or flight, immune systems already have more inflammation from a traumatic brain injury from a stroke, then you're more likely to get an autoimmune reaction to this random molecule. The most common one is gluten. Gluten is a lectin. So a lectin is just again a part of a plant and in gluten is just one term of that other lectins are coming from like dairy like casein is a lectin. Another one comes from tomatoes, legumes, right, those things.

Dr. Nick Schmidlkofer 1:12:24

And then, also speaking of legumes, legumes have phytates. So phytic acid are going to bind to minerals like zinc and iron, calcium, magnesium as well and prevent absorption. They basically just go out in your stool oxalates are another thing that are mostly in like spinach and rhubarb and turmeric and high in turmeric. And so even though turmeric has been maybe it can improve inflammation there also it's oxalates that prevented you from absorbing zinc and iron.

Dr. Nick Schmidlkofer 1:12:57

And so that's where there's all these different chemicals that can just prevent you from actually absorbing all your nutrients and can make us even more nutrient deprived. So, my experience of the diet was that I thought I was the pickiest, this is a good thing too. I was the pickiest eater as a kid. Absolutely pickiest, the only thing I would ever eat, never ate a burger. I did not like ketchup. I would eat chicken, steak, and spaghetti. And then ice cream of course. Oh, mashed potatoes were good too.

Dr. Nick Schmidlkofer 1:13:29

But, no green beans, no spinach. No nothing like that. When I got to college, I started learning about more foods and maybe the healthy thing parts of plants. So I started trying them and just saying, "Oh, it's healthy for me. I'm going to keep eating it. I'll like it." When I got to chiropractic school. Same thing, kind of learned all these things. I started just trying everything and eventually I started to then like them, so when I was "like liver" there's no way I'm gonna like liver.

Dr. Nick Schmidlkofer 1:13:56

This is gonna suck, my dad ate liver as a kid, he talked about how much he hated it. I just stir-fried it and some butter and it was fantastic. And so I eat liver, like a pound of liver every other week. And it's just the most nutrient-dense thing. It's like it's nature's multivitamin. And so my experience was that I loved eating meat and the more that I ate it wasn't tough because there's a lot of variety with organs and much many different types of meat.

Dr. Nick Schmidlkofer 1:14:28

And then I went to this carnivore-ish or more like animal based diet where basically I have some vegetables here and there as long as they're cooked thoroughly so that we can get rid of some of those toxins or break them down. And then a lot of fruit and so fruit is going to have some natural sugars and fructose. But I am somebody who can handle them. I work out every day. I'm not like against eating carbohydrates.

Dr. Nick Schmidlkofer 1:14:55

Like I said, I think it's something that the ketogenic diet is great in an initial math like three month period after a stroke or traumatic brain injury, just to decrease inflammation, support the brain with the necessary nutrients, and energy source like ketone bodies, but then you don't need to do the rest your life.

Dr. Nick Schmidlkofer 1:15:16

Then just go unprocessed food and stay meat-centric or protein-centric, because that is where you're gonna get most of your nutrients, not only macronutrients and protein, most of your protein deficient, but then micronutrients, which is where you're getting that from, like red meat. Beef and lamb and then organ meats as well.

Bill Gasiamis 1:15:37

Yeah. What did you notice physically with your body, any changes in your body?

Dr. Nick Schmidlkofer 1:15:43

I got very lean, much leaner than I was. I also like, still tried to keep up all my weights, like lifting wise, and I never went down and actually increased in some weight. And then the biggest difference that I noticed was my energy levels. From the moment I woke up to the moment I fell asleep. I go to bed at like, 9 to 9:15. It wasn't that at eight o'clock, and kind of dragging here just like watching TV or reading a book.

Dr. Nick Schmidlkofer 1:16:15

And no, I was ready to go, I was paging through I was reading. And then I hit the bed. And I was out. And sleep has always been way better on a ketogenic diet, but like, the energy levels throughout the whole day, it was just great. I was just, you feel just like in tip-top shape the whole time.

Bill Gasiamis 1:16:36

Yeah. And your brain function and your kind of fatigue levels. What did you notice in your head?

Dr. Nick Schmidlkofer 1:16:45

With no fatigue, like I felt I was I was sharp with patients throughout the day, I could have a full day and again not have any issue, wasn't like after lunch I was having that like post lunch fatigue. It was just, again, just constant sustained energy levels the whole day where I could accomplish more throughout my day.

Meat Over Vegetables



Bill Gasiamis 1:17:06

I can relate to all of that. So my first introduction into the carnivore diet was Dr. Jordan Pearson, and his podcast, which is something I listened to a lot. But the fact that he had been unwell for so many years. And what he did was take some advice from his daughter, who had also been very sick with a lot of autoimmune issues for many years. And what they did was start eating meat. And she also got him to the point of doing that, and then told him to also stop eating vegetables, which he did.

Bill Gasiamis 1:17:35

And he reports all these benefits from it. And I kind of just took that on board and left it at that I didn't feel like I was any different. Well, I wasn't the kind of guy who needed to go down that path. And then a mate of mine decided that he was going to do that, because he's the kind of guy that does these types of things. He puts his body through these tests and checks them out. And he was telling me how amazing it was and that I should try.

Bill Gasiamis 1:17:58

And he was telling me that he feels like he was on and energy was, you know, very constant. And that he lost a lot of weight became very lean. And I thought, Well, I'm gonna give it a go as well. And that's what I did, I gave it a go. And I lost five kilograms in about six weeks. And I would consider myself somebody who ate quite well, even before that, in that I was eating very, very low amounts of sugars, processed, added sugars, that types of thing.

Bill Gasiamis 1:18:31

Very small amounts of carbohydrates, like, but in the form of pasta, and bread, and any of that stuff very, very low. But I was kind of feeling a bit stodgy and didn't really have the ability to shift the weight. I don't exercise as much as I used to, because of my condition and my deficits and all that kind of stuff. So I was kind of sitting around this 80 to 85 to 86 kilogram mark.

Bill Gasiamis 1:18:57

And then I just did this for five or six weeks and immediately dropped five kilos and started to feel lighter, my brain started to feel on again, like the lights were just really bright instead of on, they were just really bright. And I started to notice all these benefits, my belly flattened out, I was sleeping better.

Bill Gasiamis 1:19:19

A whole bunch of things we're just on and they were working better. And I'm reluctant to talk about it because I'm not a nutritionist. I don't give advice on nutrition. And there's a disclaimer at the end of this podcast that says, don't take anything that me all my guests say seriously, do your own research and all that kind of stuff.

Bill Gasiamis 1:19:37

But for somebody who is recovering from a brain injury, me and for the experience I had with that diet personally, while recovering from a brain injury and I'm saying I'm 10 years into this process, but still recovering or not fully recovered. I don't know what you want to call it. But I have never done anything that has benefited me.

Bill Gasiamis 1:19:59

So dramatically in such a short amount of time. And ever, that's been as easy as this. And I thought I was going to get bored of it, and I wasn't going to enjoy it. We're talking about, we're talking about the carnivore diet right now. I was I'm salivating just speaking about it.

Bill Gasiamis 1:20:18

And I'm thinking about when I'm going to the next steak, or I'm thinking about when I'm going to my next meal, and what it's going to be and what it's going to taste like it's on what it's going to smell like. And and it's really difficult to do this at this time in our history.

Bill Gasiamis 1:20:35

And while everybody on the planet seems to be talking about how the meat industry is killing the environment, and the way to save the planet, apparently, is through becoming a vegan and never consuming meat product ever again.

Bill Gasiamis 1:20:50

And it's like, because I don't want to have a combative discussion with somebody. But because I don't have the depth of knowledge to talk about this in detail. It's really difficult to get really good information across to stroke survivors who's who I care about the most. To understand that A they're not putting the environment into danger by eating meat.

Bill Gasiamis 1:21:21

And B, they are doing themselves a service by not eating foods, like grains that are sprayed with 1000s and 1000s of different chemicals all over the planet to keep animals away from them to kill animals that are eating them.

Bill Gasiamis 1:21:39

And also, when you look at the low FODMAP diet, which is a diet that's been designed for people who have irritable bowel syndrome, and all that kind of stuff, one of the main things that is 100% grain and definitely worth eating and okay to eat, which won't inflame you or bloat you is meat.

Bill Gasiamis 1:22:02

And there's a whole bunch of grains and cereals that are in the avoid category. And nobody's connected the two and correlated the low FODMAP diet specifically says avoid a whole bunch of these things. And some of those things include almonds, pistachios, they include bread, cereals, pasta, plums, watermelon, apples, peaches, cabbage, onions, garlic, all these things are in the avoid eating if you have irritable bowel syndrome.

Bill Gasiamis 1:22:38

So clearly the inflammatory clearly they cause problems, but the only information that I've ever heard about them is that they're good for you. If my mom says to me, you know, she said to me she ate some garlic. And I said, well, congratulations I don't do that because it makes me feel sick. She just cannot comprehend how garlic can make somebody feel sick.

Bill Gasiamis 1:22:59

Now, mom's 70 something and she grew up in a different time. And she has her

own experience. And then she's just using that to have a conversation with me about. But the reality is, is that I was consuming all those types of foods that I'm supposed to avoid my entire life, and they will make me sick my entire life. And because I thought that it was healthy for me, well, because the food pyramid that I learned at school was the thing that my nutritional information got sort of built around.

Bill Gasiamis 1:23:32

I used to go back and continue doing that. And to me, it reminds me of knowing that smoking is bad for you. And reaching into a packet of cigarettes, and lighting one up, even though you know, it's bad for you and it's causing you problems. That's the extent of the problem with some fruit, vegetables and grains. That's the extent of they're making you sick, and you're kind of decreasing the quality of your life just like a cigarette will decrease and you're going back for it over and over again.

Dr. Nick Schmidlkofer 1:24:01

100% I'm glad you had such a good response because obviously, you know, most people I would say have a decent response to the carnivore diet but obviously some can't handle it. Some they can't handle the fat they have to you know include some fruit or vegetable depending on it. But yeah, like what you just said about it's something is this notion and so many people are kind of brainwashed because we've learned this our whole life that it is just this common knowledge thought that we can't change.

Dr. Nick Schmidlkofer 1:24:37

And that's kind of going back into the whole cholesterol and, and saturated fat nonsense, right? We have to be able to have an open mind and to be able to look into this deeper and that's kind of like what I was, you know, before I started I had an open mind I was just kind of like, let's let's research this a little bit. Let's see what it's about.

Dr. Nick Schmidlkofer 1:24:55

And when it made sense. I was like why not try it? But for those people that are about the environment, I mean, you can just one really good book is called sacred cow, by Deanna Rogers and Rob Wolf. And they basically talk about the ethical, environmental and nutritional benefits of eating good meat. And so I think that is something that you can push listeners to, if they, if they're questioning that.

Bill Gasiamis 1:25:29

For a chiropractor, man you're hell of have a wealth of knowledge. And I am just so excited that I got to come across your Instagram and tell people about you via this interview and share some stuff with people via this interview, we've covered a lot and you got to listen to this episode more than once to grasp some of these concepts.

Bill Gasiamis 1:25:49

And then if something sparks your curiosity, just do a Google search for it, and read into it further. That's definitely something that you are going to benefit from listening to this episode once again. Now the other thing I want to say is, go and check out Nick's website, neurologicwellnessinstitute.com.

Bill Gasiamis 1:26:08

And I don't really care if this is an ad we're not paying for this is not that type of ad. But the whole purpose of this podcast is to bring people on here that are going to make a positive difference to stroke survivors. And I'm not running ads. And I'm not trying to promote anybody or anything, but I want to give people like a resource where it's, you know, stroke survivor centered.

Bill Gasiamis 1:26:30

And basically what we're doing is bringing you kind of hopefully out of obscurity or your corner of obscurity and just trying to let people know about you. So go to the website, check it out, understand who Nick is, so that you get a good feel for why I've got him on the podcast because I don't want to bring people who are just going to run the usual line, which is, you should feel bad about eating this.

Bill Gasiamis 1:26:58

Or you should feel bad about trying this, you should feel good about doing anything that makes you feel good. And forget about what other people are telling you. We've taken advice, I have at least for around 40 years, from corporations selling me shit food, telling me that it's good for me. That's made me feel sick. And because they told me it's good for me, I continued doing it, even though it made me feel sick.

Bill Gasiamis 1:27:22

That's no different to what the cigarette companies were doing. And, people like Nick are worth listening to. So that's it, man. That's the ad. I've done it. And I

know we weren't supposed to do it. And it wasn't really that. But I love bringing people like you on because I think you're making an actual difference to people's health and well being because your approach is completely different.

Bill Gasiamis 1:27:46

And I'm not saying that we don't need medical people because without them I wouldn't be here. So hats off to them, but their expertise stops in the hospital once you're out of the hospital. That's the gap that we need to fill people like you help fill it, thank you so much for being on the podcast.

Dr. Nick Schmidlkofer 1:28:01

No problem. Thank you.

Bill Gasiamis 1:28:02

Thanks for joining us on today's episode. If you're a stroke survivor with a story to share about your experience. Come and join me on the show. The interviews are not scripted. You do not have to plan for that. All you need to do to qualify is to be a stroke survivor or care for somebody who is a stroke survivor.

Bill Gasiamis 1:28:18

And if you are one of the fabulous people that help other people who are stroke survivors like Dr. Nick go to recoveryafterstroke.com/contact, fill out the contact request form. And as soon as I receive your request I will respond with more details on how you can choose a time that works for you and me to meet over zoom. Thanks again for being here and listening. I really appreciate you see you on the next episode.

Intro 1:28:41

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Intro 1:28:58

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Intro 1:29:21

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Intro 1:29:36

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Intro 1:29:50

If you are experiencing a health emergency or think you might be, call 000 if in Australia or your local emergency number immediately for emergency assistance all go to the nearest hospital emergency department.

Intro 1:30:00

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