

## The Brain Health Workshop Week 2 Transcript

Hey, my friends. I'm Dr. Titus Chiu, and welcome to week number two of the Brain Health Workshop. I am so excited for this week's session because this is where the rubber hits the road. I'm going to be diving deeper into many of the scientific concepts and key concepts that I taught you in our last week's session. We'll be diving deeper into them, expanding on those concepts, and by the end of today's session, you're going to get some very practical actions that you can take to start healing your brain at the source.

Before we get into all the fun stuff that I've prepared for us today, let's do a quick review of week number one of the Brain Health Workshop. So, in last week's session, I introduced you to the idea of root cause neurology, this beautiful framework to help you get to the root cause for your brain health challenges, and what I believe to be the answer to the current healthcare crisis that we find ourselves in both globally and at a very personal level as well.

In addition to that, I told you about the top three neural networks. These are the most common physical reasons why your brain isn't working the way that you want it to. In last week's session, you got immediate access to the Root Cause Quiz Pack—a series of three self-assessment quizzes to help you uncover the root cause for your brain symptoms. I also showed you and introduced you to the miracle of experience-dependent neuroplasticity, the scientific reason why healing is possible. Last, but not least, you also discovered the number one missing ingredient when it comes to brain health, and that's brain training.

Wow, that was a lot of information jam-packed into last week's session, wasn't it? But as long as you watched the video and you downloaded and completed the worksheets, you did your homework, you're exactly where you need to be. And if you haven't yet, don't worry because you can watch last week's replay after we wrap up today's session. Don't forget to watch the video if you haven't and do your homework because all the information does build on itself.

So that being said, that is a quick review of last week's topics. And here's what we're going to be covering in this week's session. I'm going to be teaching you some even newer concepts—key concepts as it relates to brain training, and we're going to be going on a VIP tour of your brain. I'll be taking you on a deep journey into your prefrontal cortex, as well as your hippocampus and brainstem. I'll show you in greater detail where they're located, what they do, clues that things are off in the neural networks, and most importantly, I'm going to be teaching you a whole bunch of practical brain training exercises for you to do that you can start doing literally in the safety and comfort of your own home.

It's going to be an action-packed session today that I have in store for you full of very practical hands-on applications as well. That being said, although I am a brain health specialist, I'm not your brain health specialist. So, be sure to check with your doctor first before starting any new program. All the information I'm sharing with you in the Brain Health Workshop is for educational purposes only. Now that we got that out of the way, let us dive right into some brand new key concepts.

As you learned in Week One of the Brain Health Workshop, your brain is unique in the sense that not only does it require a healthy diet, nutrients, and healthy habits and lifestyle practices in order to be healthy, it also needs activation, because when we activate your brain and nervous system, we trigger this miracle of experience-dependent neuroplasticity in which we can use our different experiences—mental, physical, emotional—all those different experiences we have as human beings to literally trigger physical, structural changes in our brains. This is all about brain remodeling so we can heal at the source.

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So, not only is experience-dependent neuroplasticity a scientific fact, the exciting thing is it can happen at any stage of our life.

So, in this paper, "Brain plasticity-based therapeutics," the authors state that, "Not so many years ago, mainstream neuroscience and neurological medicine contended that plasticity was limited to an early childhood epoch—a 'critical' or 'sensitive' period." Meaning, what the authors are saying is that they knew that plasticity was possible, everything we're talking about, but it was limited to a very small period in time when we were children. But the authors conclude, based on the latest breakthroughs and understandings, we now know that brain remodeling can be induced on a large scale at any age in life. Meaning whether you're seventeen, twenty-seven, or seventy years old and beyond, you can heal your brain based on the miracle of experience-dependent neuroplasticity. And as you learned in last week's session, how can we trigger that through brain training?

So, before we dive into all the new information I want to share with you and go on the VIP tour of your brain, I have a question I want to ask you: What comes to mind when you think about brain training? What's the first thing that comes to mind when you think about brain training? Perhaps, it's something like this: meditation or doing Sudoku or crossword puzzles. Maybe you think about learning a new language or some type of cognitive stimulation like playing chess or something like that. And you'd be right. These are all wonderful ways that you can train your brain. But the thing is, I've worked with thousands of amazing patients and private clients over the years. Many of them struggling with brain health symptoms, such as cognitive decline, or maybe they're having memory issues or brain fog, brain fatigue, anxiety. The list goes on and on.

But the point is when they thought about brain training, or they attempted this type of brain training, they felt really overwhelmed, and they thought it was an extremely daunting task because they were already struggling with their brain health. They had difficulty with energy, and they had fatigue, and they had brain fog. The last thing that they can imagine themselves doing was learning a new language to help heal their brain. Am I right? How many of you can relate to that out there? And that's the case. That's totally correct to feel like that because all of these different types of cognitive approaches to brain training that we have on the screen here, they require a ton of mental cognitive energy. That's difficult to muster if you're already struggling with your brain health to begin with, right?

The good news is, though, that to trigger experience-dependent neuroplasticity, there's actually two main ways. So, if this one doesn't work for you, there is another one that we can approach. The two main ways to trigger experience-dependent neuroplasticity and to train your brain is number one, a top-down approach, and then number two, a bottom-up approach. So, the top-down approach refers to what I just described to you a second ago; using mental energy or your cognitive abilities and doing cognitive exercises to train your brain and trigger experience-dependent neuroplasticity. That's a great way of doing it, but as we now know, and as you probably know, perhaps personally, it requires a ton of mental cognitive energy.

The other approach, the second way of triggering experience-dependent neuroplasticity and to train your brain, is what I call the 'bottom-up approach,' and that's where we can use our body and our senses to heal our brains and train our brain and trigger experience-dependent neuroplasticity. We can be very intentional with how we do that because the reason why it's possible is all of our senses, as well as the movements we make with our body, all the information travels along very specific neural pathways. You have specific neural pathways for vision and sight. You have specific pathways for hearing

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and touch, as well as movement and balance. We can use that scientific fact in this understanding; we can use it very intentionally. The reason why it's so important is because all the different types of exercise, the bottom-up approach way of training your brain can be very specific. We can use that to strengthen specific regions of your nervous system that are at the root cause for your brain health challenges.

There are literally an infinite number of different types of brain training exercises, what I call 'BrainTRAINS,' out there that can be used to strengthen all the specific regions of your nervous system that are at the root cause for your brain health challenges. And I'm going to be introducing you to some of the most powerful BrainTRAINS for the top three neural networks that you guys have already learned about. How exciting is that?

So again, the great news is if you've tried training your brain before—or perhaps you haven't—with cognitive exercises like meditation or crossword puzzles, or perhaps some cognitive apps on your smartphone and whatnot, but the great news is there are simple things that you can do to train your brain from a bottom-up approach through physical exercises and by using your common senses.

That being said, before we dive into all that, I want to now take you on a VIP tour of your brain. Who is ready to go out on a VIP tour of your brain? After the VIP tour of your brain, you're going to have a much deeper understanding of the three most common physical reasons why your brain isn't working the way you want it to. Most importantly, you're going to get some very practical brain training exercises to start healing your brain at the source. So, without any further ado, let us continue the VIP tour of your brain with neural network number one: the prefrontal cortex.

How many of you out there struggle with brain fog? Or do you often find yourself feeling depressed, even though things in your life tend to be okay in your external environment? Or do you find yourself getting distracted easily? Do you show up late to your appointments no matter what you try to do to be on time? If you can relate to some, if not all, of these symptoms, then your prefrontal cortex might very well be the major root cause for your brain health challenge. In last week's session, you learned about where the prefrontal cortex was located.

So, we're going to take a deeper dive into that. As you know, just a quick review, the outer covering of your brain is what we call the 'neocortex.' One of the areas that makes up your neocortex is what we call the 'frontal lobe,' which sits at the front part of your brain. Now, the front part of that is the prefrontal cortex. It's the tip of this region we call the frontal lobe. So, looking at where it sits in you, it's literally right behind your forehead, so it's very susceptible to trauma from a concussion or head injury or even from whiplash. You can have injury to your prefrontal cortex. And because it's part of the neocortex, all the different structures that make up your neocortex are much more sensitive to things like toxins, as well as inflammation and stress. So, that's where your prefrontal cortex is located, and because of that, it's very susceptible to trauma.

The neocortex and your prefrontal cortex, specifically, also make up what's known as the 'dolphin brain.' This is the more enlightened and higher parts of yourself, the higher brain functions. Paul MacLean tried to model the brain. Paul MacLean was a neuroscientist in the 1960s who developed this really interesting way of looking at the brain and nervous system in what we call the 'triune model of the brain.' He broke up the brain into three functional distinct parts. The top part is what we call the dolphin brain. We'll be exploring the other two throughout the rest of this week's session.

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So, the dolphin brain, a big part of what makes up the dolphin brain, is your prefrontal cortex. It's what allows us—pretty much, to summarize in a nutshell—it allows us the functions of being human. It gives us our personality. It lets us really just tune into our higher selves. It gives us the ability to have foresight and insight and patience, have compassion and empathy for others, really all the wonderful things and what it means to be a human being, the best version of ourselves possible. Much of that is located and is a function of your prefrontal cortex.

In addition to that, it's also involved in what we call 'executive functions.' Now, these are higher cognitive functions, such as being able to plan and organize your thoughts and anticipate the future, and in addition to that, to have discernment and judgment. All these things, these higher cognitive functions, are what we call executive functions. And really, the prefrontal cortex is in charge of most of those executive functions.

In addition to that, the prefrontal cortex is important for what we call 'working memory,' a form of short-term memory where you store an idea or a concept in your mind while you go work on some other things, and then you come back to that. So, the ability to kind of shelf that idea for a short period of time and then keep that without it falling out your earholes is what we call working memory, and that's a function of the prefrontal cortex.

A great example of that is chess. Chess is a great game that requires a lot of higher cognitive skills. One of them is working memory. As an example, if I'm playing a game of chess, I can make a move, and then I have to think about what my opponent's move is going to be. Based on what my opponent's move is going to be, there's a whole series of other possibilities that I can move as well. Then that continues to build on itself.

But then, if my opponent makes a different move, if she decides to move the knight instead of the pawn, I have to consider all those possibilities all while planning my move and then making the move. So, my ability to hold all that information in my mind while my opponent makes those moves and I'm continuing to play the game is a great example of working memory.

So, working memory, again, is holding an idea or ideas or concepts in your mind while you go work on other things and then making sure that it doesn't fall out. That's a function of the prefrontal cortex. In addition to the prefrontal cortex, very important for decision-making, as well as fine motor control, like specifically things with your digits, with your fingers, and it's also important for different types of eye movements. This will be really important when we talk about what we can do to help heal our prefrontal cortex.

Here's some clues that there might be something wrong with your prefrontal cortex: brain fog or brain fatigue, having trouble or problems with those executive functions that I talked about before, poor focus and concentration, having issues of fine motor control like being a bit clumsy with your fingers and not having good manual dexterity. That can be a sign that your prefrontal cortex is not working as well as it could be. In addition, do you ever feel indecisive or have a hard time making decisions? Do you get easily distracted, or do you have difficulty with verbal expression, which is another function of the prefrontal cortex? If that's the case, or you scored high on the prefrontal cortex quiz, then your prefrontal cortex might very well be the root cause for your brain health challenges.

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In addition to that, some common conditions or quote-unquote 'diagnoses' related to prefrontal cortex issues is ADHD—attention deficit hyperactivity disorder, or suffering from depression, Alzheimer's, impulsivity, and what's known as 'expressive aphasia,' a problem with expressing yourself through language, through speech.

Does any of this sound like you? Or did you score high in your prefrontal cortex quiz? If you scored high or any of this sounds like you, then your prefrontal cortex, again, might very well be the root cause for your brain health challenges. The great news is, as I taught you previously, there's some very specific brain training exercises, or BrainTRAINS, that you can do to help strengthen your prefrontal cortex because, as you know, your brain is unique and it responds to activation and experience-dependent neuroplasticity. I'll be introducing you to some of the most powerful BrainTRAINS for your prefrontal cortex.

Brain train number one is what we call the 'figure-eight.' The figure-eight is a great way of training your prefrontal cortex from the bottom up through a very special type of movement. Let me show you how to do the figure-eight right now. What you're going to do is you're going to take your arm, and you're going to make a figure-eight movement just like this. Go ahead, join me right now. Make a figure-eight type of movement. As you can see, I'm making a figure-eight with my arm. It's a very flowy movement, just like this. The key is you want to make the movement more with your shoulder than rather with your hands, not so much like this, but more of these big broad movements. But to keep it interesting—so let me show you now blown up—what you can do is make bigger movements; you can make smaller movements because your brain loves novelty. You can even change the speed. Or if you like, you can make smaller movements with your hands as well.

Believe it or not, when you do that special type of movement, your prefrontal cortex loves it because of one of the major functions of your prefrontal cortex is, like I mentioned earlier, to control fine movements, but also just to coordinate complex movements in general. Making this figure-eight type of movement is a fantastic way of training your prefrontal cortex.

It's good to do both sides, and you can start off with fifteen seconds, each arm. That's typically a good starting point for most people. Obviously, if your arm gets tired or sore, do a little bit less. The more you do it, though, it's going to get a lot easier. Not only will your arm get stronger, but so will your prefrontal cortex. So, that's the first BrainTRAIN for your prefrontal cortex.

The second one is what I call the 'frontal lobe finger tap.' The frontal lobe finger tap is a fantastic and easy way, again, using a bottom-up approach, a special type of movement to train your prefrontal cortex. Let me show you right here. The way we do it is simple. What you're going to do is you're going to take your thumb and index finger, and then you're going to touch them together. Go ahead and do that right now. Then you're going to take your thumb and middle finger, touch those together, then your thumb and your ring finger, and finally thumb and your pinky. So, it goes like this. Then to deepen the therapeutic effect of this exercise, what you can also do is say the words SA, TA, NA, MA. SA TA NA MA. These are tones that you can incorporate to the frontal lobe finger tap. Research has shown is when you do the frontal lobe finger tap—when you tap your fingers like this, and you incorporate the tones SA, TA, NA, MA, that powerfully awakens your prefrontal cortex.

And again, just like with the figure-eight, you can do it on both sides. I recommend starting for a minute. That's typically a good starting point, doing it for a minute—SA, TA, NA, MA, SA, TA NA, MA—and then

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also do it a minute on the other side as well. Make sure you do both sides. But if you'd like to further personalize it for your brain, you can focus on the side that you find it harder. Some of you out there, you might find that doing it with your left hand, for example, is a little bit harder than doing it with your right hand. You might not. But if you do, then you can focus and do it longer on the side that's a bit more difficult. So, there you have it. That's the frontal lobe finger tap. That's the second BrainTRAIN for your prefrontal cortex.

And last but not least, for your prefrontal cortex, the third BrainTRAIN is what I call 'mini eye jumps.' So like I mentioned earlier, one function of your prefrontal cortex and of your frontal lobe, in general, is to move your eyes in a special type of movement, what we call 'saccades.' Saccades are a quick type of eye movement where your eyes move from object to object, and they jump around like this, versus there's another type of eye movement that we call a 'pursuit' where you follow, or you're tracking an object like this. The cool thing is you can use different types of eye movements to target different regions of your nervous system. So, the fast type of eye movement, where you jump your eyes from object to object, triggers neuroplasticity in your prefrontal cortex, so that's why BrainTRAIN number three is the mini eye jumps.

Here's how you're going to do the mini eye jumps. What you're going to need to do is create a piece of paper that looks just like this. You take a piece of paper, and you draw five dots. One in the center and one about an inch or two to the right, to the left, and above and below that center dot.

Once you have that piece of paper, what you're going to do to do the mini eye jump exercise, you're going to take that paper to the wall at eye level, or you can simply hold the piece of paper in front of you at eye level. And you're going to focus your gaze on the center dot right there in the center. You're going to gaze at that, then you're going to jump your eyes to the dot to the right of the center. And you're going to hold that for one second. And then you're going to jump your gaze back to the center dot.

So, the whole pattern, just to give you the big picture, you're going to be jumping your eyes horizontally side-to-side and then up and down. And so here is how we do it step-by-step. Start in the center, then jump your eyes to the right and gaze at the right dot, jump your eyes back to center, then jump your eyes to the left dot here, and then jump your eyes back to the center.

And from there, you're going to then go up and down. Then you're going to jump your eyes to the top dot there, jump your eyes back down to the center, and then jump your eyes to the bottom dot, and then back to center.

And so, what I just described there, going side-to-side and up and down, that is one cycle. And believe it or not, when you do that, you are training the neural network of executive functions. You're training your prefrontal cortex. You might notice as you do this that there are several things to watch out for. You might find that, number one, your reaction time is a little bit slower. So, as you're jumping from the center off to the right, you might find that typically this type of eye movement should be super-fast. When you jump your eyes, it should go right to the dot.

You might find that there is a bit of a lag time. If that's the case, then what you want to do is work on speeding up your reaction time. I can't tell you how many times I've worked with patients and private clients in office and when I see a slow mini eye jump where their eyes were slower, I can almost predict that their reaction time—but cognitive reaction time—as well as many times, their reaction time

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physically is also slow. You heard that saying that the eyes are the window into the soul; they're also a very powerful window into the nervous system, as well as the prefrontal cortex. The cool thing is when you train your eyes through these mini eye jump exercises, you're not only speeding up your eye movements, you're also strengthening your prefrontal cortex.

In addition to that, you can also just take some post-it notes if you don't want to just put a piece of paper. Or, as you get better at this, you can spread the dots apart and put up the dots on some post-it notes at eye level, and instead of maybe just one or two inches away from the center, you can put them further away and then make bigger eye movements. But I recommend, if you're starting out, do smaller eye movements first—the mini eye jumps—and as you get better at this, start to spread the eye movements further and further apart. And like I said, as you get better at this and you get faster, and your eye movements become more accurate, not only are your eyes getting stronger but so is your prefrontal cortex.

So there you have it, ladies and gentlemen, the top three prefrontal BrainTRAINS to help strengthen your prefrontal cortex from the bottom up. The figure-eight arm movement, number one. The frontal lobe finger tap, number two. And finally, the mini eye jumps.

So, my question to you, which prefrontal cortex BrainTRAINS are you going to try? So take a few moments right now, grab a piece of paper, jot down the ones that you're going to try that seem most interesting to you, and you'll be one step closer to healing success.

Now, the great thing is, in addition to these BrainTRAINS that I'm teaching you, there are also what I call 'BrainTRAIN upgrades.' These are special lifestyle activities, exercises, and maybe even hobbies that have been shown in the research to actually strengthen your prefrontal cortex. You might actually be doing some, if not many of these, already. But what I'm going to teach you is how to be intentional with it based on the neural network weak link that is the root cause of your brain health challenges. So, for the prefrontal cortex, here are the top prefrontal upgrades: number one, meditation. As I taught you already, meditation is a powerful way of strengthening your prefrontal cortex.

Number two, ping pong. The hand-eye coordination, as well as the timing and the reaction, is a fantastic way of training your prefrontal cortex.

Number three, dancing. When you're timing your body movements and coordinating your body to rhythms and to music. That is one of my favorite ways of training the prefrontal cortex.

Number four, as I mentioned earlier, chess, because that's a great way of training executive functions, as well as working memory.

And finally, number five, juggling. Again, the whole idea of the hand-eye coordination.

When you train that in all these different activities like ping pong or juggling, or even the movements with dancing, when you get better at those, not only are you getting better with hand-eye coordination, as well as timing of your movements, and you're getting stronger, you're also strengthening your prefrontal cortex. How amazing is that?

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So my question to you is, which prefrontal upgrades are you going to add to your daily wellness routines? Go ahead, jot that down on your piece of paper, as well as you can fill that into your brain health roadmap that you had downloaded as part of your homework from week number one. So, there you have it, ladies and gentlemen, neural network number one, your prefrontal cortex.

Now, as we continue your VIP tour of your brain, we'll be entering neural network number two, your hippocampus. Let's take a closer look at the hippocampus. I had already introduced this area of your nervous system to you in week number one, but let's take a deeper dive. But before we do, let's step back for a second and review what we've learned about your brain. So, again, the outer covering of your brain is what we call the neocortex. In the tip of it, we find the prefrontal cortex, which is found at the front part of this other area we call your frontal lobe.

If you bring your attention to this other area of neurological real estate that makes up your brain, you can see what we have here is the 'temporal lobe.' Now the temporal lobe is really important for language comprehension, as well as processing sounds and music. This is found on the outer covering of your neocortex. But if we flip this around and look at the inside portion of your temporal lobe, here, we will find the hippocampus. And so the hippocampus actually comes from the Greek from hippos meaning horse and campus, meaning sea monster. Let me share the screen and show you where it's located and why it's called the hippocampus. As you can see here, it looks like a little sea horse or a little sea monster. So, you got this little sea monster inside your noggin that's known as the hippocampus.

And it makes up a really important part of our nervous system. In Paul MacLean's triune model of the brain, where we have the dolphin brain that is made up, in large part, from the prefrontal cortex, we also then have the second part of the Triune model of the brain, the mammalian brain. And the mammalian brain is all about bonding; it's all about emotions and our emotional experiences of ourselves and the world and other people around us.

And the mammalian brain is comprised mainly of the limbic system, which is also highly in charge of our emotional experiences. Now the hippocampus is one small part of the limbic system, but it's a very important part because the hippocampus is what allows us to have memories and, in particular, emotional memories. For example, if you probably recall in your life, the things that you really remember are the things that typically have an emotional charge around it, whether positive, like your first birthday and that first piece of cake you had, or negative in certain experiences of trauma. All of that, our ability to remember the best as well as the worst experiences in our life, is highly due to this area of the nervous system we call the hippocampus that makes up part of your limbic system and forms a big part of the mammalian brain.

Now, the really fascinating thing about the hippocampus is not only does it—and it's involved in the formation of emotional memories—it's really important for memory in general, for consolidation of short-term memories into long-term memories. So, not even just emotionally charged experiences, but also a form of memory that we call 'declarative memory,' where we remember facts or dates. Or another form of memory we call 'episodic memory,' where we are able to remember our experiences and events and stories.

So the hippocampus, in general, is very, very important for all different types of memory—episodic memory, declarative memory, and a lot of emotional memories. In addition to this consolidation of memory, the hippocampus is also in charge of spatial navigation. Meaning, when we explore our

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physical environment, when we're walking around new neighborhoods, and we're remembering different landmarks and how to navigate where we've been to, that's a function of your hippocampus. Your hippocampus is what allows you to create these mental maps of physical environments that you've been in before. The hippocampus is very important when it comes to spatial navigation.

And finally, for our purposes, another very important function of the hippocampus is it controls the stress response. So many of you out there have heard about the adrenal glands already. The adrenal glands are very important because they produce the stress hormones cortisol as well as adrenaline. And those stress hormones help us deal with and step up to life's challenges, very important for us to be able to handle everyday stressors of living. The interesting thing, though, is that the adrenal glands, they don't control the amount or the rhythm at which your cortisol and other stress hormones are released. What's in charge of that actually is these other areas known as the 'hypothalamus' and the 'pituitary gland.' So there's this entire communication network that's known as the 'hypothalamus-pituitary-adrenal axis' or 'HPA axis' for short, and that's what gives us the ability to step up to life's challenges.

Now, the thing is, many of you might've actually heard of that before, but the fascinating thing is there's an area of your nervous system that sits at the top of that and actually controls and dictates that whole communication network, the HPA axis. And guess what area of the brain that is? Yep, you guessed it, it's the hippocampus. The hippocampus is really important for actually setting the rhythm of cortisol because throughout the day, cortisol should actually be high in the morning, and then it should actually go and decrease throughout the day. So, by the time you go to bed, you're unwound, and you're ready for rest, and you're able to have deep, deep sleep. So, that's what is in charge of setting that rhythm, isn't the adrenal glands by themselves, but a very important part of that is the hippocampus. The hippocampus is very important in terms of control of the stress response and even sits on top of and regulates the whole HPA axis, the whole stress response.

And so those are three major functions of the hippocampus that is really important for our conversation here. Number one, the consolidation of memory. Number two, spatial navigation. And finally, number three, controlling our stress response.

Here's some clues that your hippocampus might not be working the way that it should: Number one, having memory issues. In particular, having difficulty remembering facts or remembering new ideas or concepts. Number two, getting easily lost, or perhaps forgetting where you parked your car, or forgetting where you left certain common everyday household items like your glasses. 'Has anyone seen my glasses? Anybody?' How many of you can relate to that? Or if you ever walk into a room and just completely forget why you walked in there in the first place.

Do you have a need to rely on your GPS? If you're traveling from point A to point B, you're just unable to get there without having your navigation system in your car or on your smartphone? In addition, do you experience—even worse—physical disorientation, where you just feel physically out of sorts and disoriented—physical disorientation? Or, finally, do you have a really hard time handling stress?

In addition, common conditions associated with problems with the hippocampus are Alzheimer's, dementia, amnesia, as well as seizure disorders. Does any of this sound like you? Do you resonate with any of those clues or common conditions I just described, or did you score high in the hippocampus root cause quiz? If that's the case, then your hippocampus might very well be one of the major root causes for your brain health challenges.

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Now, the great news is that there are BrainTRAINS—brain training exercises—that you can do to literally strengthen and regrow new brain cells in your hippocampus. And I'll be sharing with you the top three, as well as some upgrades as well.

So the first BrainTRAIN for your hippocampus is physical exercise. Simply walking forty minutes a day, three times a week. These study participants back in 2011 participated in the study, and just by walking forty minutes a day, three times a week, the researchers found that the participants, the size of their hippocampus had actually increased simply by walking. It doesn't even have to be anything fancy or require any type of special equipment or apps or different things of that nature. Simply walking forty minutes a day, three times a week, not only did the participants increase the volume or the size of their hippocampus, but they also found improvements in their memory.

You now understand why that's the case because the hippocampus is in charge of our memory. It's in charge of the formation of new memories, as well as recall of previous memories as well. That is why physical exercise is the first BrainTRAIN for your hippocampus.

BrainTRAIN number two for your hippocampus is turn off your GPS. And I mentioned this earlier, your hippocampus acts as your internal GPS, the internal navigation system of your brain. So, when you start relying on things such as GPS or your car's navigation system, you start losing those brain cells. You've heard that saying before, right? Use it or lose it. Well, when you start relying on things like your GPS, your car navigation system, and stop relying on your brain's own innate ability to navigate, you start to shrink those brain cells. But the great news is when you start training those areas, and you turn off your GPS, and you start relying on your own memory and your own mental maps as you're navigating new environments, or even trying to get home from familiar routes that you're either driving on or walking on—when you train that ability, you also strengthen your hippocampus.

Now here's a pro tip. In addition to turning off your GPS, I challenge you next time you're on your way home—either you're walking, or you're biking somewhere, or even driving—try taking a new route. Obviously, have a sense of the area and understand the route beforehand, but try taking a new route on your way home, either home from the grocery store, or if you're going for a walk in your neighborhood, try and explore a new route to get home. The reason why it's important to do this is because, like I mentioned earlier, your brain loves novelty. And in particular, when you try exploring new routes home or exploring new ways of getting from point A to point B, your hippocampus absolutely loves that. It's challenging, but it loves the novelty, and it is a great way for creating deeper experience-dependent neuroplasticity.

So, there you have it. That's BrainTRAIN number two—turn off your GPS, plus a little pro tip for you guys out there who want to challenge yourselves a bit more.

And finally, BrainTRAIN number three for your hippocampus is alternate nostril breathing. Alternate nostril breathing is a practice that comes from ancient yoga practices that span the course of thousands of years in a form of breath control that's known as 'pranayama.' And so alternate nostril breathing is fantastic because what it does is helps increase oxygenation to your hippocampus. And like I mentioned earlier, in regards to your prefrontal cortex and all areas of your neocortex in general, including your hippocampus, these areas of the neocortex are very sensitive to changes in circulation, specifically oxygen circulation to your brain. And in particular, the hippocampus is very sensitive to changes in oxygenation.

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If you're not getting optimal oxygen to your brain, your hippocampus can really feel the effects. So, anything you do to improve oxygenation can go a long way towards healing your hippocampus. And so that's why BrainTRAIN number three is the alternate nostril breathing. In addition to increasing oxygenation, it's also been shown to lower stress, improve cardiovascular function. It also improves lung function, as well as respiratory endurance. So, when you do this, it becomes a good feed-forward cycle, meaning it builds on itself because you improve lung function and respiratory endurance, you get more oxygen to your brain, and so on and so forth.

So alternate nostril breathing is fantastic, not only for your brain health, but also for stress as well as your heart and lungs. I'm going to walk you through step-by-step, I'm going to read these instructions for you and how to do it, and then we will then do it together.

This is how you perform nostril breathing. So, step one, you just want to sit comfortably, and then step two, exhale completely all the breath out. Then step three, you're going to take your right thumb to close your right nostril. Step four, you're going to then inhale through your left nostril here, and then you're going to close it with your right pinky. Then you close your left nostril with your right pinky, and then with the open right nostril, you're going to then exhale through it.

And then, from there, you inhale through the right nostril, and then you take your right thumb, and you close that again. And through your open left nostril now, finally, you exhale. There you have it. That is one complete cycle of alternate nostril breathing.

So now, let me walk you through that whole process step-by-step without too much instruction, so we can now do it together. Again, sit comfortably and then exhale completely. Take your right thumb, put it on your right nostril and then inhale. With your right pinkie, cover your left nostril and exhale and then inhale. Cover your right nostril with your right thumb and exhale. There you have it! That's how you perform alternate nostril breathing. What I just demonstrated was one cycle, and I recommend you repeat it up to five to ten times.

Now, the thing is, if you have any type of cardiovascular or lung issues to begin with—respiratory issues—do check with your doctor first before performing these to make sure that it's right for you. For those of you out there, even if you don't have any health issues like that, if you're doing this and you feel any adverse effects, like you feel faint or lightheaded or perhaps even dizzy, then stop the practice. If you want to try again after you feel better, ease into it, perhaps breathe less and not as heavily. If you're trying and you felt dizzy or lightheaded or any adverse reaction after five times, perhaps just try doing it three times. The point is don't make yourself feel bad from doing the alternate nostril breathing. That completely defeats the purpose.

But for many of you out there who practice this consistently and build it into your everyday brain health rituals, I guarantee you it's going to be a huge way of increasing oxygenation to your brain as well as growing new brain cells in your hippocampus. So, that is alternate nostril breathing. Feel free to review the step-by-step approach to this amazing, amazing ancient technique that has been shown to improve all these different functions related to brain health, stress, cardiovascular function, as well as lung and respiratory function as well.

So, there you have it, everybody. The top three hippocampus BrainTRAINS. Number one, physical exercise. Number two, taking a new route home or turning off your GPS. And finally, number three,

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alternate nostril breathing. In addition to the hippocampus BrainTRAINS, there are also these amazing, easy-to-do lifestyle exercises and even hobbies that you can incorporate into your everyday life to help increase the function of your hippocampus, and here are the top five:

Number one, stress management practices. As I mentioned earlier, the hippocampus is really important because it controls the stress response, but did you know that the hippocampus itself is very sensitive to excess cortisol? Meaning, if you're under chronic stress, the cortisol that floods through your blood and reaches your hippocampus can be very damaging, creating a vicious cycle. One of the best ways of breaking that vicious cycle is through practicing stress management practices. Things like the breathing exercise I just showed you. Or physical exercise is a great way of also boosting your stress resilience.

In addition to that, number two, meditation has also been shown to grow brain cells in your hippocampus and could be a fantastic way of practicing stress management as well.

A third way of hippocampus upgrade is by playing memory games. There are many different apps out there that challenge you and challenge your memory that are fantastic ways of strengthening your hippocampus.

Do check out the handout in the member's area, and we have a link to a few of our favorite memory apps that you can download to your smartphone or even use on your laptop or your tablet as well.

In addition to the memory games, the number four hippocampus upgrade is learning a new language. I mentioned this earlier, and for some of you out there who really are drawn to new languages and cultures like myself, you might want to try it out and learn a new language and take a course in French or in Spanish or Chinese, Japanese, all the wonderful different languages which are beautiful windows into all the different cultures that make up this wonderful, wonderful planet. So, try learning a new language if you really want to take your hippocampus to the next level.

Finally, hippocampus upgrade number five is more an advanced treatment known as 'hyperbaric oxygen.' Again, like I mentioned earlier, the hippocampus is very sensitive to changes in oxygenation to the brain as well as blood circulation. Anything you do to increase that, something as simple and easy to do at home, like alternate nostril breathing all the way up to more advanced therapies such as hyperbaric oxygen. Very briefly, hyperbaric oxygen is where you enter a little chamber, and inside the chamber, the pressure is then changed, so it causes the oxygen that's already in the chamber to be further pushed deep into your tissues, into hard-to-reach places in your brain or in your body and thus increasing the benefits of oxygenation to these areas, in particular your brain and hippocampus.

There you have it. Those are the top five hippocampus upgrades. These are anywhere from simple things that you can do at home all the way up to advanced treatments such as hyperbaric oxygen therapy. My question to you is, which hippocampus upgrades and BrainTRAINS are you going to try out? Go ahead, take out your brain health roadmap that you already downloaded from your homework, and write down a few of the hippocampus upgrades and BrainTRAINS that you'll be trying out this week.

Hippocampus neural network number two in our VIP tour of your brain. We're now exiting your hippocampus, and finally, we are entering neural network number three of the VIP tour of your brain, which is the brainstem. Let's take a closer look at the brainstem now, shall we?

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The brainstem, as you had learned in last week's session, it sits in between your brain and your spinal cord. You can see it right here, and I'll show you up close. Your brainstem is actually made up of three parts, the top, middle, and bottom. Let me show you the model of the brainstem right here. If we're looking straight ahead, this is just one-half of the brainstem. The top part is what we call the 'midbrain' and the middle part, right here, is what we call the 'pons,' and then finally, the bottom part is the 'medulla oblongata.' Let me show you a side view. You can see here, again, this is the top part midbrain, and this part that pops out here is known as the pons, and finally the bottom part, the medulla oblongata.

Now one interesting fact is that in between the pons and the medulla, this junction here, we find the famous vagus nerve. The vagus nerve is a very important way station in the balance between your fight-or-flight response and your healing response. The vagus nerve is actually located right here in the junction, what we call the 'pontomedullary junction,' between the pons and the medulla. Many of the BrainTRAINS that I'll be teaching you in neural network number three of the brainstem rely on the fact that we'll be activating and using this understanding that the vagus nerve exists here. Many of the BrainTRAINS are activating the vagus nerve, triggering a healing response. We'll get to that in a little bit but let's continue to explore neural network number three, your brainstem.

Do you have anxiety, or do you have trouble with sleep? Do you have a difficult time either falling asleep or staying asleep, or perhaps both? Do you have an exaggerated startle response, or do you feel just stuck in a state of fight-or-flight? If you can relate to some, if not all of those symptoms, your brainstem might very well be the root cause for your brain health challenges. As I showed you before, the brainstem is located in between your brain as well as your spinal cord, and it's made up of the top part, the midbrain, this middle portion we call the pons, and finally, the medulla. In between those areas is where the vagus nerve is located. In the triune model of the brain, like we talked about before, the prefrontal cortex makes up a big part of the dolphin brain, and then we have the hippocampus and limbic system that makes up the mammalian brain.

Now the brainstem is also part of the triune model of the brain, but it makes up this other area that's known as the 'reptilian brain.' The reptilian brain is in charge of scanning our environments for danger, making sure that we're not under the threat of anything, both real or imagined. If there's one word that sums up what the brainstem does, it's all about survival. Essential, life-sustaining functions are really due to the functioning of your brainstem.

In addition to that, the brainstem is also important for making sure that we're alert and we have focus and energy, and we're awake and alert and paying attention to our environment. In addition, it's important for pain sensitivity control. There's an area of the midbrain known as the 'periaqueductal gray' that's very important because it houses a bunch of our anti-pain molecules known as 'endorphins.' The brainstem is very important for the ability to suppress the sensations of pain.

In addition, the brainstem is important for setting our sleep-wake cycle and providing control of circulation such as blood circulation and oxygen, and nutrients to all of our tissues. In addition to that, the brainstem is also involved with digestive function as well as our heartbeat. Many automatic functions that happen behind the scenes without us even thinking about, are due to the brainstem working. If it wasn't for the brainstem, we would not be alive. It's all about survival, so thank God for our brainstem.

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But when the brainstem isn't working, and here's some clues that it might not be, we can experience some, if not all, of these different symptoms where we feel startled easily, experiencing chronic pain or chronic stress, or feeling anxious all the time. Do you experience sleep problems, either falling asleep, staying asleep, or both? You can also have poor circulation if your brainstem isn't working.

In addition to that, one unknown cause of chronic gut issues is actually the brainstem because, like I mentioned before, one of the major functions of the brainstem is to control your digestive processes. Now people could have digestive issues because there is an issue with the gut like what we call 'leaky gut' or having problems with bacterial or yeast overgrowth in our digestive system, and that's actually a problem of the digestive system that needs to be resolved. But did you know that many chronic and stubborn gut issues sometimes are completely due to brainstem issues? Because when the brainstem is not working well, the brainstem then can't control the digestive processes well. You won't have good gut motility. You're not going to have a good release or adequate release of digestive enzymes or HCL, all the important things that are needed for proper digestive function. So, a very commonly under-recognized root cause for stubborn gut issues is problems with your brainstem. Can you relate to some, if not all, of these symptoms?

In addition, common conditions associated with brainstem problems are migraine headaches, or anxiety, insomnia, chronic pain syndrome, dysautonomia, where we have an imbalance in the fight-or-flight response or the rest-and-digest response—problems of the autonomic nervous system. The fancy term for that is dysautonomia. In addition, like I mentioned, you have chronic digestive symptoms like small intestinal bacteria overgrowth or leaky gut.

And finally, PTSD—or post-traumatic stress disorder—has also been associated with problems in the brainstem. Does any of this sound like you? Did you score high in the brainstem root cause quiz? If that's the case, then your brainstem might very well be one of the major root causes for your brain health challenges.

The great news is, as always, there are specific BrainTRAINS—brain training exercises that you can do, simple things that you can do, actions that you can take—to help heal your brainstem at the source. I'll be teaching you my top three favorite BrainTRAINS for the brainstem, as well as some additional brainstem upgrades.

BrainTRAIN number one is what we call 'one-two breathing.' I mentioned this earlier. We talked about alternate nostril breathing, which is a fantastic way of increasing overall oxygenation to your brain. But when you practice one-two breathing, what it does specifically, it helps to blow off excess carbon dioxide. Because one thing that creates an imbalance in the brainstem is too much carbon dioxide. For those of you who often find yourself holding your breath or not breathing, or maybe you have issues with breathing—like you breathe like this, where you use your shoulders, and you have tight neck muscles and shoulder muscles, and you're not very good at belly breathing—then this one-two breathing can really be a game-changer for you.

Here's how you do it. It's very simple. The one-two breathing refers to the ratio of inhalation to exhalation. As an example, if you breathe in for five seconds, you simply breathe out for ten seconds. I'll do that right now. I'm going to take a breath in for five seconds and then breathe out for ten seconds. It's as simple as that. That is one-two breathing. Again, when you practice that, you're increasing the

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ratio of oxygen to carbon dioxide, blowing off excess carbon dioxide and helping to calm an out-of-balance brainstem. That's BrainTRAIN number one.

BrainTRAIN number two for your brainstem is toning. Toning is where you create sounds, different types of sounds, that activate your vagus nerve. There's many different types of sounds that you can create to practice toning. My personal favorite is the sound of 'ahhh.' It's just like giving out a big sigh of relief. Let's go ahead, and I invite you to join me in doing that right now. I'll show you how to do that, this BrainTRAIN number two, toning. You just take a breath in, and when you breathe out, ahhh. It's just giving a big sigh of relief.

In addition, other toning sounds that you can make, one of the most famous ones that you guys have probably heard of before, is the sacred sound of 'aum.' So, aummm. The sacred sound of aum is also a form of toning. Go ahead and pick whatever sound. You can choose different types of vowels that sound or feel right for you. So, try it out, saying, ah, or oh, or ee, or aummm. All those different sounds help to activate your vagus nerve and help to calm an out-of-balance brainstem. So, that is BrainTRAIN number two, toning. I encourage you to give it a try and see what feels right and feels best for you.

Finally, BrainTRAIN number three is palming. This is one of my absolute favorite brainstem BrainTRAINS. This is great for people who are on computers a lot who need a break from screen time, if you find yourself on your phone or watching TV or just on screens a lot. This is also great for people who experience brain fog or brain fatigue or who have headaches after spending time on screens.

I'll show you how to do it. Step one. If you wear glasses—you got to remove your glasses before I walk you through it. So, just watch. You're going to take the fleshy part of your palms right here, and you're going to gently close your eyes, and then you're going to take the fleshy part of your palms and put them right over your eyelids. I invite you to join me in this palming exercise. Go ahead, gently close your eyes, and now take the fleshy part of your palms and put them right over your eyelids. Rest them just really gently over the eyelids. The key is you want to put some pressure but not too much pressure. Imagine the amount of pressure you would put over an egg yolk. You don't want to put too much pressure there, just enough gentle pressure so you can feel it but not to where you feel any pain. You just hold your palms over your eyelids here, and you can take a few deep breaths and just allow yourself to sink into the experience and probably notice more and tune into the darkness.

For many of you who find yourselves on screens a lot or find yourselves having eye fatigue, or brain fog, or headaches, you might find this extremely, extremely comforting and soothing. It's great for people who also have anxiety as well. Take a few more deep breaths in ... and out ahhh. One more deep breath in ... and out, and feel free to let out a big sigh of relief and, ahhh. Now before completing the palming exercise, what you're going to do when you remove your palms, keep your eyes closed, because what you probably notice now—even with your eyes closed—there's more light you're probably noticing coming in. If you immediately open your eyes after performing the palming exercise, that's a big shock to your nervous system. The whole point of this exercise is to relieve your nervous system from this excess visual stimulation that so many of us are exposed to every single day. So, sit for a few moments after you remove your palms with your eyes closed.

Finally, to wrap up this BrainTRAIN for your brainstem, as you open your eyes, maintain what I call a soft gaze where you're not really focusing on the screen, or you're not focusing on me right now. It's just a

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really soft gaze where you're more bringing your awareness to the periphery around you, your peripheral vision, and do that for a few more seconds. Ahhh.

So there you have it, everybody. That is one of my favorite BrainTRAINS, the palming BrainTRAIN. This is fantastic because not only does it activate your vagus nerve, but it also clears a lot of mental stress from cranial nerve two, what's known as your 'optic nerve.' That's the nerve that brings in light information as well as visual information to your brain. Yeah, for many of us in our modern world, we find ourselves engaging with screens all the time; this is a fantastic way of clearing the clutter. This is wonderful because it's actually an ancient practice developed by Tibetan yogis thousands of years ago to clear mental clutter and to help clear out and detoxify mental stress. I'm bringing it from thousands of years ago to you. Right here in our modern-day, it works just as well.

There you have it, everybody. Brainstem BrainTRAINS. The top three of my favorite brainstem BrainTRAINS. Fantastic ways of resetting your brainstem and healing your brain at the source. Number one, one-two breathing. Number two, toning. And finally, number three, palming.

Which brainstem BrainTRAINS are you going to try? Go ahead, grab your brain health roadmap and fill in the box for Week Two of the brainstem BrainTRAINS. Which of these are you going to try? Go ahead, jot them down so you can always refer to your brain health roadmap later on after the session.

Before we wrap up neural network number three, let's introduce you to some great BrainTRAIN upgrades. These are simple things that you can do, and I encourage you to incorporate into your everyday lifestyle routines. So, brainstem upgrades:

Number one, face or earlobe massage because the middle part of your brainstem that's known as the pons, actually has sensors for touch. When you do touch or gentle massage of your face or your earlobes, that's a very powerful way of activating and calming your brainstem. And for those of you out there who want to spice it up a little bit. You can go ahead and cross your arms like this and massage your earlobes, using your right hand over your left earlobe and your left hand over your right earlobe. Because when you do this, and you massage your earlobes like I'm doing so, what that does, not only does it activate your vagus nerve, but it also helps to create communication between your left hemisphere and the right hemisphere of your brain. So, if you want to spice up your earlobe massage, get a little relaxation and stimulation at the same time. Go ahead, cross your arms while you do the earlobe massage.

In addition, a great way of activating your vagus nerve and your brainstem is by humming. Similar to toning, but instead of vowels and sounds, you just hum your favorite song. Humming activates your vagus nerve, as does a simple belly massage by taking the palm of your hand. Even if you want to rub your hands together like this, to generate some heat, and then gently putting your hands—your palms on your belly, that actually activates your vagus nerve as well. Because located all throughout your digestive system, you have motion detectors that sense movement. When you put gentle pressure on your belly, you're activating those stretch receptors, those movement sensors, and in doing so, activating your vagus nerve and brainstem.

Number four brainstem upgrade is enemas. Same concept, located all throughout your digestive system are stretch receptors. Meaning that when you do an enema and water gets engulfed inside of your

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colon, the stretch of that triggers a nerve impulse that rides up the vagus nerve and enters your brainstem. Thus triggering a parasympathetic response, a.k.a., a healing, resting, and digesting response.

And finally, brainstem upgrade number five are cold showers. Cold showers helps to trigger, through a paradoxical reaction, a very strong parasympathetic response. Because when you're first exposed to cold, your body goes into a state of alarm, and it triggers the opposite—the sympathetic nervous system. The magic happens after you leave the shower. Once you get out, your brainstem then needs to shift gears and activate the parasympathetic response and, in doing so, increasing blood flow, and it helps to shift from the fight-or-flight to arresting, digesting, and healing response. Now, for those of you out there who are very cold-sensitive, you might not want to start immediately with a cold shower. You can start by taking a normal warm or hot shower, and then at the end of the shower, turn the knob, so it starts to get closer and closer to cold, and over time you'll be able to develop that tolerance.

But for those of you out there who are really, really sensitive to the cold, and that does not sound pleasant at all, another way of doing this and getting a similar response is just by simply splashing cold water on your face. It can also trigger the activation of your vagus nerve as well as a healing, resting, and digesting response.

So which brainstem upgrades are you going to add into your everyday rituals? Go ahead, take your brain health roadmap worksheet, fill it in, jot a few notes down, so you'll have it all in one place by the end of this week's session, as well as the rest of our time together.

Before we wrap up our VIP tour of the brain, here's an important point to remember: Over the years, when I've worked with patients who were struggling with some type of brain health challenge, I found one of the biggest mistakes that they made was that they are constantly, always, just working on their health. But the thing is, it's not just about working on your health. It's not about adding new things or adding more exercises or new diets or supplements or seeing therapists, or getting treatments. Now that's important, obviously, because if you want to improve your health, you need to do those things. But sometimes, I find patients get so caught up in that process and so focused on it that they forget to step away from that. Step away from all the focus and the mental energy that they're putting on their health. Because it's not just about working on your health, it's important to remember it's about the experience of health. And in order to actually reap the benefits of all the hard work that you've put into your health or that you will be putting into your health, it's really important to step away from it and have downtime so your nervous system can integrate and reap the benefits of all the things that you've already done.

And especially when we talk about brain training, this is such an important concept. Not only do you want to exercise your brain, but you also want to do things that help your brain integrate all of the training that you already have done or you will be doing. One of the best ways of doing that is by incorporating the brainstem upgrades and brainstem BrainTRAINS into your everyday life.

Before we wrap up this section, let me share with you Jen's story. Jen was a patient of mine who I worked with, who had suffered a concussion, and after her concussion, she was struggling with brain fog, fatigue, and headaches, and the thing was, she was doing all the right things. She was getting treatments, she was doing at-home exercises, brain training, she was taking supplements. She was seeing other therapists. She had so much on her plate, but not only that, but she was also trying to work still and be there for her coworkers. She had so many things going on, and so when she came into my

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practice, because she was doing all this stuff, she still wasn't getting better. And so when she applied to work with me, and we dove into the root cause neurology approach, I uncovered, and we both uncovered that she had issues with her prefrontal cortex, as well as her brainstem.

But the thing was, when we looked at it together, and I spoke with her, she came to the conclusion, and I helped guide her towards that, that she just had way too much on her plate. Not only just in her life but even in the treatments that she was doing, she was just doing way too much. They were all the right things for her, but she didn't have enough downtime in her life, so she can actually integrate and reap all the benefits and rewards of all the different treatments she was doing.

So, the biggest thing that she took home that I taught her in terms of her action plan and her treatment plan wasn't adding new things; it was actually, as a matter of fact, taking away a lot of it and focusing on just a few. And some of the core things that we focused on were the brainstem upgrades, as well as brainstem BrainTRAINS. I had her doing palming exercises. In addition, I had her doing more breathing exercises and just having some downtime to slow down and not always be churning her mental energy in her brain. When she started to implement those things, after just a few weeks of not doing as much, she experienced a lot more energy throughout the day. Her focus improved by eighty percent, and her daily headaches went from a six out of ten to a one out of ten. And again, it wasn't the fact that we added more things, we removed a lot, and I had her focus more on doing the brainstem upgrades as well as BrainTRAINS that you know how to do now as well.

I had the same experience when I was healing my own brain by focusing more on activities that help integrate and help to recharge my brain and nervous system. I was able to heal my brain. I did it. Jen did it. Thousands of my patients and students did it. And I know the same is possible for you. Simply by adding a few brainstem BrainTRAIN upgrades, as well as just allowing yourself some downtime for integration.

One last thing that seems so paradoxical, but what I found to be one of the most powerful lessons I learned in my journey to heal my brain, sometimes you need to slow down to go faster.

And there you have it, ladies and gentlemen. Neural network, number three, your brainstem. And with that, we now conclude the VIP tour of your brain. I took you on a deep, intense look at the three key neural networks that make up your nervous system. Number one, the prefrontal cortex. Number two, your hippocampus. And finally, number three, your brainstem.

So, before we wrap up this week's session, here's a few do's and don'ts when it comes to brain training. Be sure—especially if you're experiencing brain symptoms already and if you've never tried the BrainTRAINS before—be sure to ease into the BrainTRAINS. What do I mean by that? So if you've never done these before, don't just do all of the different BrainTRAINS that I shared with you. I know there's a lot of information, so don't just go out there. One thing I see a lot in my students, they get really excited, and they want to try all the different things at once. It's a lot of stimulation and challenge to your brain, especially if you've never done them before. So, be sure to ease into them.

So, as an example, I said earlier, if you're going to do the figure-eight, a good way of starting out is fifteen seconds. Don't try to do that for like a minute or three minutes. A lot of patients and students that I teach, they think like, more is better.

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Actually, when it comes to brain training, especially as you're starting out, less is more. Be sure to ease into them, and as you get better at it, then you can start to expand and start to challenge yourself even further. So, be sure to ease into your BrainTRAINS as you're getting started, and don't overdo it. What do I mean by that? These BrainTRAINS, although they might seem pretty simple and pretty easy ... You guys are probably like, *Figure of eight. I can do that in my sleep. Or frontal lobe finger tap, Dr. Chiu, or these eye movements.* But believe it or not, these are very, very powerful ways of activating all these different neural networks that we described.

Again, if you're already experiencing symptoms or if you have brain fog or brain fatigue, don't overdo it with the BrainTRAINS. How do you know if you're overdoing it or not? Well, if you end up feeling symptomatic. If you have lightheadedness or dizziness, or if you get headaches, when you're doing that, the different BrainTRAINS, then you know you've overdone it. How else can you know if you've overdone it? If you experience fatigue while you're doing it or you feel very, very tired.

The analogy I like to use is, have you ever gone out and haven't exercised in a while? Let's say you're pretty in shape, but you had to take a break from working out or exercising, whatever, and you had to take a break from that for a while, maybe for a few weeks or months, and then you thought, *I'm just going to get back into it. I'm going to exercise at the same intensity, same amount of time that I did before the break.* And you do that, and the next day, you're just sore all over. How many of you have had that experience before? The thing is, your brain is the same way, similar to your muscles. If you haven't worked them out as much, or ever—these are new muscles that you're exercising—you want to make sure you ease into it, again. And you don't overdo it because instead of sore muscles, you can experience symptoms, or you can experience brain fatigue.

But the great news is even if you do overdo it, which sometimes you've got to learn what you're able to handle—your capabilities—sometimes you got to challenge yourself. But the great news is if you do overdo it, as long as you give yourself enough downtime afterwards, and you give your brain enough recuperation time, then you will be okay, and you'll actually grow from the experience. Again, just like with physical training, training your body. If you overtrain your body, you actually don't make gains, you start to lose muscle, and the same thing goes for your brain. If you overtrain your brain, you're not going to make as many gains.

But that being said, if you overtrain and then you give yourself enough downtime and enough time for your brain to recharge and recuperate from the brain training, then you might actually find that you've gone two steps forward, five steps back, and then seven steps forward, or nine steps forward that is. Even if you do overdo it and you give yourself enough downtime, then you will be exactly where you need to be.

So, before we wrap up here, here's another important point. Even if you didn't score high on any of the quizzes, I still encourage you to take a few of these BrainTRAINS and upgrades and add them to your everyday wellness rituals because these are a great addition to brain health wellness in general. The amazing thing about brain training is, it doesn't just work on areas of the nervous system that are weak, and they're at the root cause for symptoms, but the same concepts, experience-dependent neuroplasticity that form the foundation for brain training, the same concepts applied to taking your brain health to the next level. Even if you didn't score high in any of the quizzes, that's okay. You can still benefit from these BrainTRAINS. So, pick a few of them. Put it to the test, and whichever ones that feel right to you and are either challenging or you feel better after doing, then just continue.

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And last but not least, be sure to build these BrainTRAINS and upgrades into your everyday life. It's not just about doing an exercise here and there, once or twice, it's about building them into your everyday life. So, what are some ways of doing that? So as an example, with the figure-eight, as you go for a walk these days, you can try going and doing a figure-eight as you're walking, or maybe try doing a frontal lobe finger tap as you're walking down the street, or in addition, the brainstem BrainTRAINS and upgrades. Those are fantastic ways of incorporating into your stress management practices. Wonderful ways of resetting your nervous system, as well as the stress response. Be sure to build these BrainTRAINS and upgrades into your everyday life; your brain will thank you for it.

And last but not least, before we wrap up this week's session—I know there was a ton of information—I want to revisit our good friend, Esther. As you know, from last week, Esther, she was struggling with many difficult cognitive challenges. She had problems remembering things, and she was feeling scatterbrained, even though previously, she had really prided herself on her brain function. In addition to that, she was experiencing increasing brain fog. All these symptoms were getting worse over the course of few years, and she was concerned because of her family history of Alzheimer's. And as you know, she went through the Root Cause Quiz Pack—just like you guys had done—and uncovered the root causes for her brain health challenges. And after a few months doing these brain training exercises, she started to see improvement, but here are the specific things that she did:

So, she began to do the frontal lobe finger tap one minute a day, three times a week. In addition, she also started exercising, just going for a walk thirty minutes a day, three times a week. And finally, she also added a few brainstem BrainTRAINS. She was doing toning and palming in the morning, doing that five times a week. And as you can see, all these different things that you had learned, these BrainTRAINS, they strengthen the prefrontal cortex, they grow new brain cells in the hippocampus. And for her, even though she didn't score a high on the brainstem root cause quiz, she was really stressed in her life. She was stressed about her health, and she just had so many things that she was juggling in her life. So, she thought that'd be a good idea to add these toning and palming exercises, help reset her stress response, even though she didn't score high on the brainstem root cause quiz.

These are the specific brain training exercises she did, in addition to some foundational diet changes, nutrients, lifestyle mindset practices, all of which you're going to be learning through the rest of our time together in the Brain Health Workshop. So, with all these things she did after just a few months, as you know already, she was no longer forgetting things, she was having more energy throughout her day, better focus and concentration, and her brain fog improved by eighty-five percent. Isn't that amazing?

After over three years of watching her brain deteriorate and being worried and scared because she had a family history of Alzheimer's and Dementia, just by implementing a few simple natural things—some brain training exercises for her neural networks, different types of brainstem BrainTRAINS and upgrades that helped reset her stress response, and some foundational diet changes, nutrients, lifestyle, and mindset practices—she was able to turn her life around. She did it. I was able to do it. Thousands of my patients and students have done it, and I know the same is possible for you.

I'm probably sounding like a broken record, but I just want you guys to know that healing is possible. You now have the tools to take your brain health to a whole new level. You've uncovered the root causes for your brain health challenges. I've showed you a whole bunch of different brain training exercises that you can do, starting today, right now, to start healing your brain at the source. And with

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that concludes the VIP tour of your brain. Wow. What a session we had today; you guys did so well. Thanks for sticking around. Quick review before we wrap up here.

I took you on a VIP tour of your brain. We went through the prefrontal cortex, hippocampus, brainstem, and I taught you a bunch of brain training exercises and upgrades that you can start experimenting with right away. So, that was everything that we learned this week.

For next week, I'm going to be teaching you one of the most common hidden forces, one of the biggest obstacles I've seen when it comes to healing the brain. This thing, if you don't address this, will stop neuroplasticity in its tracks. So, not only am I going to be teaching you what it is and why it's important, but I'm also, more importantly, going to teach you what you can do about it in week number three of the Brain Health Workshop, as well as the rest of our time together.

So, from now until week number three, here is your homework. Number one, try one of the prefrontal cortex BrainTRAINS out. Just give it a whirl, rewatch the video, check out your brain health roadmap, the notes you had taken, and try out one of the prefrontal cortex BrainTRAINS. Number two, try out a hippocampus BrainTRAIN. And finally, number three, give a brainstem BrainTRAIN a try, because knowledge is one thing, and you've learned a lot in this session today, but it's the actions that you take, those are the things that are going to actually create the experience-dependent neuroplasticity needed to turn your health around. So, be sure to—if you haven't already—download the brain health roadmap, fill it out, rewatch this video, review the BrainTRAINS from the prefrontal cortex, the hippocampus, and brainstem. Try out at least one from each, from now until our next session.

And for those of you who want a bit more bonus and challenge, I encourage you, pick one of the upgrades, any upgrade from any of the neural networks, and schedule time for it in your calendar this week. So, in addition to the BrainTRAINS, pick one upgrade, one of the easy lifestyle exercises or hobbies that you can start incorporating and give it a shot, schedule some time for it this week and try it out and see how you feel.

Again, knowledge is one thing, but it's the actions that you take that literally will change your life. Thank you very much for your attention. And don't forget to engage in our online community.

Before we wrap up here, I want to leave you with this final message. I know that if you're struggling with the brain health challenge, that at times it can feel so discouraging, it can seem like the road ahead is so long and winding and daunting. The great news is you are now one step closer to healing success. You are now empowered with the Root Cause Quiz Pack, as well as uncovered the root cause for your brain health challenges, and you have a bunch of brand new brain training exercises that you can try out literally today, in the safety and comfort of your own home.

My name is Dr. Titus Chiu. Thanks so much for watching. I look forward to seeing you in week number three of the Brain Health Workshop. Bye for now.