The Brain Exercises That Boost Dopamine and Neuroplasticity Transcript

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Movement and Brain Health

Hey, today I'm talking about the best exercises for brain function. Improve your memory to improve your mood and your overall cognitive acceleration. Your ability to think sharply and quickly.

In general, movement itself is critical for brain. In fact, I consider it an essential nutrient for your brain whenever you're moving your body or moving your joints.

Something called proprioception, which is the brain has to know where those joints are in space, and it's sending information up into your brain and it's enhancing all the neural pathways.

So movement in general is key when we're exercising, let's say we're doing aerobic exercise or weightlifting or something like that. We are actually increasing the quality of the mitochondria.

The mitochondria produce all the energy within the cells of our body. And our brain is the most dense area for mitochondria, the neurons. And so when we exercise, we increase the amount of mitochondria and the functionality of those mitochondria.

And ultimately the quality of our life comes down to the amount of high functioning stress resilient mitochondria we have in the cells of our body, and in particular, when it comes to our brain, in the cells of our our neurons.

And so super critical that we're doing some level of movement, some level of exercise, right? When we're doing a robotic exercise, we are increasing we increase mitochondrial content.

So mitochondrial biogenesis, we get the benefit there. We're increasing the amount of mitochondria. When we're doing weightlifting. We're starting to build lean body tissue.

That lean body tissue is going to be more mitochondrial dense than fat tissue. So we're building muscle muscles very mitochondrial dense fat very low in mitochondria. Right.

And so, very important that we're building muscle.

Cross-Crawl and Rotational Exercises

So we're building more of these mitochondria now, muscle contractions themselves also activate something called myo kinds, which are kind of these compounds that have been shown to quench inflammation in our body.

So in a sense, the hormones that the muscle releases that bring down inflammation, we also increase something called brain derived neurotrophic factor, which increase like miracle grow in our brain.

It increases the synapses, increases the stress resiliency of the neurons, and allows for better connections in our brain so we can think sharper and quicker, have better memory and better mood.

So all exercise, great strength training, aerobic exercise. Fantastic. Now let's talk about some specific exercises for our brain. One is cross crawl exercises.

Think about a baby crawling. You know it might have its right arm coming up and left leg coming up at the same time. So it's the, in a sense, between the upper body and the lower body.

It's the alternate extremities that are moving and that sort of cross crawl movement. When we're when we're moving the different sides of our body and the different parts of our body in a, in a kind of a unique way like that,

that helps to activate the corpus callosum, which is the part of our brain that links the right and left hemisphere.

And the better the stronger, the more what we call neuro plastic that corpus callosum is, the healthier our brain is going to be in general. And the ability to deal with stress, our ability to handle stress and perform under pressure is enhanced.

And that's really key for all the things we do in our life. And so doing some sort of cross crawl exercise, it could be something like right hand to left knee, left hand to right knee, doing something like that.

And even if you're able to bring more rotation into your body. So if I'm rotating my body a lot, that activates more and more of that corpus callosum.

So rotational movements as well as cross crawl type movements, super key for activating that corpus callosum, great for brain health.

Balance Training for Cerebellum Function

Also balance exercises. We know that falls actually put more people in the hospital than anything else. And so really key to stay out of the hospital is to improve your balance.

But also the better your balance, the better your brain. If you've got poor balance, you know, if you feel like you're really clumsy or running into walls, things like that, it's actually a early warning sign that there could be some cognitive issues, some brain issues going on, brain inflammation that's impacting your balance centers in your cerebellum and your frontal parietal cortex, and so important that you can actually work on that.

You can actually build better synapses and just overall positive neuroplasticity changes in those balance centers of your brain by working on balance exercises.

Right. So doing one legged exercises where I'm standing just on my left leg or just on my right leg, I might close my eyes. Okay. In fact, if you've ever, you know, seen somebody tested for a DUI because I know you would never have been tested for a DUI.

But if you've seen somebody tested, what are they doing? They're doing, like, a heel to toe walk, that heel to toe walk. Really? Challenges are cerebellum.

And if somebody has drank too much alcohol, their cerebellum is inflamed and not working right. And therefore they will be really clumsy as they kind of try to do a heel to toe walk or a finger to nose, right?

If they're doing a finger to nose and they're hitting, you know, the side of their cheek hitting their eye, that's a sign that they don't have the refinement of those fine motor movements that's done by the cerebellum.

Vestibular apparatus, helping balance them and helping with fine motor coordination. And so these are things that you can do. You can do balance exercises.

You can do finger to nose exercises. That helps ramp up activity in the cerebellum, in the vestibular apparatus. Doing balance exercises where you're balancing on one leg, you might close your eyes, might be in a hallway where you can, you know, easily kind of touch the wall on the side if you need to, and you might do a heel to toe walk down the hall with your eyes closed right and beginning.

You might start with just the heel to toe walk, and then do it with your eyes closed. You can actually do strength training exercises with your eyes closed.

One thing that I will do is actually like a bent over a bent over reverse fly, which is kind of like this right here works your posterior deltoid muscles, but I'll do it on one leg.

Right. So I might go like this. And I also might close my eyes. Okay. So now it's like I'm balancing on one leg and then I might alternate. So now I'm going back and forth between my left and right.

Now might seem to advanced for you. And that's fine.

Novelty and Cognitive Challenge

If it is I'm just trying to give you options. You might just start by standing on your left leg for five seconds, and then coming back and standing on your right leg for five seconds. That's fine.

Do balance exercises that will help keep you out of the hospital, and will help activate proprioception and joint receptor activity in your ankles. Your knees. To help prevent injuries.

And it's going to it's going to improve your brain. And so that's so key. And then finally last thing I want to talk about is aerobics. And aerobics are kind of unusual exercises right.

Unusual things like for example, brushing your teeth with your non-dominant hand or combing your hair. Okay. So you might come right handed. So I brush my hair with my right hand.

I brush my teeth from my right hand. Well guess what. Once or twice a week I might actually switch it and brush my teeth with my left hand. That is going to create more activity in my brain, increasing synapses, increasing neuroplasticity in my brain, and enhancing overall brain function.

So that's something really, really powerful. You know, you could if you go the same route to work every day or to the grocery store, you could try taking a different route.

You're being exposed to a new environment. Your brain's having to think quicker, in order to do that. That's something really interesting. You could smell different smells.

That's called an aerobic exercise. So it's a new and novel movement, right. And those novel, the novelty of it creates, stress in your brain that allows the brain to grow and adapt to that stressor.

So adding in some aerobics here and there can also be really, really helpful. This is where like the idea of crossword puzzles can be really helpful. A lot of people will do crossword puzzles.

You know, they have to kind of learn new words and have to think sharply. You know, I have to be creative with it. And so playing any type of game oftentimes can, can be an an Arabic type exercise that can set your brain up for success.

So these are simple, easy things you can be doing to enhance your brain. And the better your brain, the better your quality of life is going to be. So try these out today.