

TJ Nelson: Week three is all about getting over the inertia to exercise. Exercise, we all know that exercise has this antidepressant effect. We know it's good for us. We know we should be doing it. Yet, so many of us don't do it. So many of us are too overworked, too tired, have too many chores, have to go run the errands, work too much. We never find enough time to exercise. The recent research on exercise and depression, we can see that exercise clinically has been proven to be more effective than Zoloft because it literally changes the brain.

Depression changes the brain in a negative manner. Depression literally changes the structure and function of your brain. Under brain scan, you can see all the reduced Grey matter in the brain, reduced functioning, reasoning, ability to take initiative. Exercise releases BDNF, that key growth hormone that reverses these toxic effects that depression has on the brain. We know depression, exercise, we should be exercising. We should be moving. We should be running, all the stuff, yet so many of us don't do it. Exercise is literally medicine. It literally changes the brain.

What are the reasons we feel so good when we exercise is because of serotonin that, that magical chemical in the brain. When you exercise, you're going all these hard work. Your muscles have the huge demand so they call out for amino acids. The blood stream releases amino acids all to your muscles that can use it under the stress that they're in. Now, the interesting thing is it calls for all those amino acids to be used in your blood stream except for one and it's Tryptophan. If you remember earlier how we discussed the production of serotonin is through the amino acid Tryptophan. Tryptophan isn't called to be used in your muscles under exercise. Tryptophan gets a free ride across your blood brain barrier and is able to go straight into your brain so that your brain can convert it into serotonin.

We know exercise releases BDNF, the key growth hormone. We know we have serotonin released when we're exercising. We know we should be doing this. Why aren't we doing it? Well, if we take a look at our ancestors. Our ancestors, they were exercising all the time. The thing with them is they're hiking 15 miles a day. They're running, they're chasing after prey, they're gathering berries, they're building shelters. All those activities, they have one thing in common, they have a clear purpose. All those activities have a very clear purpose of why they were doing them. Our ancestors at the end of the day end up hiking 10 miles to find bushes full of berries, they're not going to sit there and come back and lift a boulder 30 times for three sets because they want to work out their muscles. That would be detrimental. That will cause them less likely to survive.

It's kind of the same situation now. We see those treadmills. We see those elliptical machines but you're not going anywhere when you're on those things. It doesn't have a purpose. When we go on those machines, we're not going

anywhere. We have no reason for being there except for we're just running along trying to exercise. All our ancestors did was to exercise with a clear purpose in mind. Clear example of this as I was reading the book and they did all these studies and one lady had depression. Her family kept saying, "Hey, let's go for a walk. Let's go exercise. Let's do this." She never could get herself off the couch to go exercise. They tried something different. They said, "Hey, let's go shopping." They knew that she loved to shop. They ended up shopping. Three hours later, walking miles and miles and miles and the lady had exercise basically half the day because she was going from store to store with a clear purpose in mind.

Same thing with most people, if you tell someone to walk seven miles, they're not going to walk seven miles in that day. If you take the average visit to Disneyland, you see that they've tracked them and average visitors to Disneyland actually walks seven miles while they're in Disneyland. We are hard wired to avoid unnecessary activity and we're hard wired to go after necessary activity. Necessary activity is easy when there's a clear goal or purpose in mind. If we're doing something with a purpose and that's enjoyable, we like doing our motivation and our incentive to do it goes through the roof.

This reminds me of a long time ago. I was struggling with drug addiction because as one of the things I'm using to try and cope with my depression. One of the things I got hooked on was marijuana. For me, getting off marijuana is one of the hardest things I ever did. What I tried doing was I started running up in the mountains. I had this specific set point I wanted to run to and back. Whenever I start to kind of I don't know if I want to run anymore. I would kind of start walking the rest of the way. I didn't get the full benefit. What I started to do was I actually imagined a marijuana leaf was chasing me from behind. I imagined there was a marijuana leaf literally behind me and if I stopped running, it would catch up to me and that would mean I was going to smoke weed again.

It's kind of a crazy thing I made up in my mind. I started increasing my run so much. By the end of the summer, I was running miles and miles all at ones in the middle of the heat in the mountain because I had a clear purpose so it's easy to keep running and it was enjoyable. If you find yourself having a hard time going on an exercise bike or a treadmill, don't worry because I mean it is obvious those things are pointless. I ran a marathon at one time in my life but I could never run long distance on a treadmill. I could never do it. I had to be like, "Hey, I'm running to this hospital and back." That was my goal. That was my only way I was able to go run and prepare myself for the marathon.

I'm not saying you got to go run a marathon or lift the heaviest weights at the gym in order to get an antidepressant effect. A lot of people think you have to have hard core intense triathlon Ironman type style training to get the

antidepressant effect of exercise. Research has actually found that if people just sustained their heart rate from 60 to 90% of their maximum heart rate for 30 minutes three times a week, that proved a significant antidepressant effect. You don't have to do the most intense activity for antidepressant effect but just 30 minutes three times a week getting your heart rate up. Around 75% of the maximum heart rate was really found most beneficial.

I mean, if you don't have a heart rate monitor, you don't want to make this too complicated, basically if you can exercise for 30 minutes only three times a week and get it to a point where carrying on a conversation isn't so easy anymore, you can't just have a 30 minute conversation while you're running and have it be effortless where you want to get to the point where you're breathing hard and it's not so easy to talk, that means your heart rate is in usually within that range.

You don't have to be all out crazy to solve your depression. Actually if you do find yourself having to go all out crazy to solve your depression we'll talk about that can be an issue later on. Exercise, it literally has been shown to be more effective than medicine, more effective than Zoloft. It releases that key growth hormone that reverses the effect of depression. We all know we should be doing it. If you guys aren't already doing it, we're going to get you guys start exercising. You only got to do three times a week. If you're already exercising, we'll also talk about a few other things to keep in mind so that you don't over train or do anything like that. Remember, exercise, it's one of those things. It's easy to forget. A depressed mind, the depression literally reduces your ability to take the initiative. All we want to do is overcome that initial inertia to start exercising.