

Grow New Brain Cells

You can grow healthy new brain cells.

Get at least 20 minutes of moderate cardio a day.

(Half an hour is better.)

Start where you are and build up.

Have fun! If it's a chore – nothing will happen.

New brain cells seem to be resistant to damage from stress!



LEARNING FROM JOHN: LESSONS ON RECOVERING FROM STROKE

LISA STUEBING, CPT AND OWNER OF MUD PUDDLE FITNESS, LLC



I have the best job in the world! I get to meet and work with amazing people. As a personal trainer and group fitness instructor I get to have a deeper relationship with my clients than I would if I had chosen to become of physical therapist. I get to keep up on the latest science and be a resource person for people who are challenging themselves.

It's the only job I can think of where I get to travel with theme music.

CASE STUDY

I'd like to tell you the story of one of my favorite clients, John. I first met John several months after a massive stroke. Pretty much the entire left side of his body was unresponsive.

John was a self-made man who had come from a hard scrabble upbringing. He told me that when he planned to do a thing he would look at all of his options – then, he would see the entire project in all its complexities in full detail all at once. He never doubted his vision in business and credited his success to this uncanny ability.

John was an incredibly hard worker and highly self-motivated. He was willing to focus and do whatever it took to reach the end result.

His focus, when I met him was to walk again. He would often tell me that he dreamed he could do it and was ready.

BODACIOUS GOALS, LITTLE STEPS

The first lesson I learned from John was to continuously define goals and successes. Because of John's gift of seeing the completed picture – it was hard for him to understand that we had to progress step by step.

John's neurologist was on board in the belief that John could walk again. He also had the near tireless support of an amazing daughter who was willing to do whatever it took to help him.

The big challenge was to convince John that progress would be made one action at a time. Successes were celebrated, but soon forgotten, because each little success was not the big prize. For example, the first time we got both toes tapping to the beat of the music we cheered out loud! I rounded up everybody in the household to watch the accomplishment. Then, when I came back two days later, John told me he had his dream again! That success set aside, it was time to get back to serious business. John did not suffer fools.

THE PLAN

There were four key factors to our plan:

- 1. Isolation of muscles
- 2. Mirroring
- 3. Lots of repetitions
- 4. Coordination of anatomy trains

Working with resistance banding and weights. I taught John a number of exercises to stimulate individual muscles. We also worked with muscle action that links together. Then, we would mirror the movement. If he wanted 50 biceps curls on the right, guess who got to help with 50 biceps curls on the left? Finally we would throw in an activity that would require practicing multiple new skills at the same time.

Given John's focus and sole orientation to the goal of walking again. You can probably imagine the discussions over learning to juggle scarves! I believe I was almost fired for this nonsense.

WHY THE PLAN WORKS

As a fitness professional, I do not always know why a muscle is not responding. Is the command for the action of that muscle damaged? Are too many muscles trying to act at the same time and cancelling each other out?

In both cases, there is the same technique: Talk to each muscle privately. Move the function of that muscle from the damaged area of the brain to a healthy area of the brain. Through a technique of my cueing, and the client practice, the function can be moved to a new place in the brain.

Automatic function occurs in the hippocampus. The seat of higher learning is the healthy outer cortex of the brain.

Several factors contribute to help make this work.

First, there are a lot of reasons to pick up a leg and move it. For example, we walk, but we also run, kick, frog march, strut, roller skate, and skip. In John's case he could also do a thing called "The Hucklebuck". For most people, activities that are similar are stored near each other. The damage from the stroke might have knocked out walking – but not necessarily something else.

Memory is cross indexed. It might be near impossible to just will yourself to kick a ball – when you can't take a step. Fortunately, the access to kicking the ball may be linked to other memories. For instance, the smell of fresh mowed grass on a sunny late spring morning may remind you of a day in the park with your oldest child – learning to kick a ball. All triggers are worth a try: sight, scent, touch and sound.

MUSIC IS KEY TO SUCCESS

Music that is pleasant to you lights up your brain like the Las Vegas strip. If you like Chuck Berry and somebody foists Katy Perry on you nothing big is going to happen. You have theme music. You have a soundtrack. Almost every important event in your life likely had music in the background.

John was a ladies man. Although currently out of full commission, John was interested in me thinking of him as strong and capable. All of my clients pick their workout music and John picked the swing music of the war years. We talked about long marches, heavy rucksacks, hardships and sacrifices.

I knew something was wrong with his music choices. He never seemed to sway to it. He couldn't name a favorite big band. He just was not that into it!

At the request of another client, I had tracked down a crazy old Chubby Checker classic called "The Hucklebuck". It was a number one hit song, December of 1960. Do you remember it?

A little bit of twist and a little bit of this
If you don't know how to do it, ask my little sis
First you push your baby out
Then you hunch your back
Then you get a little movement in your sacroiliac
You wiggle like a snake
You waddle like a duck
And that's how you do "The Hucklebuck"

Yessirree, they just don't write them like that anymore!

I asked John if he'd like to give the song a try and he flatly refused. He told me that he did not like that kind of music. He had a son who lived an "alternative" lifestyle. His son played that kind of music. No, he did not like it. Did I tell you that John does not suffer fools? It took a little horse wrangling, but I did convince him to give me two minutes and thirty seconds of his time.

We pushed our babies out, moved our sacroiliacs. We wiggled like snakes and then John waddled like a duck! Both legs waddled! We played the song over and over again. Each time we saw the same thing – John could waddle like a duck.

The next time I reported for duty. Something had changed.

FACTORS THAT CAN BLOCK SUCCESS

John's son had passed away. He was able to move to the music because it was tied to the love of his only son. There were painful memories there. John had decided we were not going back to that music.

Because this work requires us to dig around in associations of the past, sometimes we bump into feelings that a person might have thought were long resolved. Memories can flood the mind. They can be vivid and fresh. Sometimes, the newly re-dredged memories can present a set-back.

Sad memories and stress can make recovery slow to a halt. Stress comes from every direction. It comes from the loss of health. It comes from the frustration of having to do everything in a new way. It can even come from a steady diet of gloom and doom on the TV newscast.

If necessary, I recommend that a professional therapist be included in the care team. The sooner the past can be put back in its rightful place behind you – the sooner you can focus on and progress with your recovery.

Which for John meant that his seemingly paralyzed limbs could begin to move again and he could become seriously buff!

IN CONCLUSION

You can push past plateaus in your stroke recovery. It takes courage. Sometimes it takes facing things you thought were long put to rest.

Remember, stroke recovery requires a partner with specific knowledge. Your Coach should know how to isolate muscles in order to retrain them. Your Coach should be able to help you mirror your exercises on both sides of your body. Your Coach should know you well enough to know when it is time to put all of the actions together into coordinated activities.

You already possess the keys to success! Remember each action is almost like another action. If you can't walk, maybe you can dance! Also, remember that memories are cross-indexed. Live life large. You never know when the scent of a certain perfume of the way the light slants across a field will give you an idea of how to proceed. Finally, pick a theme song for yourself. Find your soundtrack and you will progress your recovery.