

# How Repetition Can Heal Your Brain Faster during Stroke Recovery

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You've heard us preach about the importance of **neuroplasticity** for stroke recovery before. It's the #1 thing all stroke survivors should know about.

Neuroplasticity is the *healing* you need, and repetition is the *tool* for accessing that healing and **speeding your recovery along**. (A Snappy Guide to Recovery from Stroke Quickly – 6/17/2016). In order to explain why repetition matters so much, you need to understand neuroplasticity first.

## Neuroplasticity – The King of Rehab

Neuroplasticity is the mechanism that your brain uses to rewire itself. There are two ways that neuroplasticity works: the creation of new connections between neurons (brain cells), and the deletion of old connections.

After stroke, a chunk of the brain becomes damaged and those brain cells are unable to carry out their tasks. For example, arm movement can become difficult after stroke if the part of the brain responsible for movement is affected. In order to heal from this damage, the surrounding areas of the brain can pick up the slack. Meaning, they can learn the tasks that the damaged parts once controlled. This is neuroplasticity. And you can activate neuroplasticity through repetitive practice.

## The Key to Neuroplasticity: High Reps

So if you want to regain arm function after stroke, then you need to repeat arm rehab exercises over and over and over until it sticks and your brain has successfully rewired itself. Because each time you move your arm, you begin to *form and strengthen* connections between the neurons responsible for that arm movement. That's why learning a language is so difficult, for instance. We have to repeat new words over and over and over again until they stick. You're forming new connections in the brain, *and it takes lots of practice*.

## Practice, Practice, Practice

The extreme importance of repetition is why some rehab tools, like our **FitMi**, are so valuable. FitMi helps you accomplish 400+ repetitions per session, whereas traditional therapy motivates around 30 reps. As you can imagine, neuroplasticity is activated much faster by completing 400 reps instead of 30, which means that you see results faster. (One of our customers started seeing results after just 3 days!) Which goes to show: The more you repeat something, the stronger your neural connections become, and the stronger your skills become.

## Repetition Is Nothing without Consistency

So you've got the repetition part down now, so you're good, right? All your bases are covered... Well, not quite. The neurons in your brain need good repetition in order to strengthen themselves, but they also need *consistency* in order to stick. For example, if you complete 400 reps of full-body movements, but you only do that once a week, then you're in trouble. Because 400 repetitions is great! But the time in between rehab sessions will cause those new connections to weaken.

So if you want to maximize your healing, you need to be repetitious and consistent with your rehab exercises.

## Using Repetition for Motivation

All the examples we've been using so far have revolved around **movement after stroke** – and for good reason. It's important for your quality of life, safety, and independence. But another way that you can use neuroplasticity to improve your quality of life is by using it to hardwire **motivation** into your brain.

This is especially important for those who procrastinate on their rehab exercises or can't find the willpower to keep going. Because when you feel like giving up, there's a thought in your brain telling you to give up. And if that's a pattern, then your brain is really good at telling you to give up! (Repetitive practice still works even if you're not aware of it.) So if you tell yourself to *keep going* – to keep taking one small step each and every day – and you do that over and over and over, then you will hardwire persistence into your brain. If you tell yourself that *you've got this* – that all your hard work will pay off even if you can't see results yet – and you repeat that to yourself multiple times a day, then you will hardwire **confidence** into your brain. You have the power to become whatever you want to become. It's just a matter of letting go of old connections (like self-doubt **and** fear) and forming new ones (like persistence and balance). So, what will you use neuroplasticity for? *Will you repeat those rehab exercises consistently from here on out? Will you talk kindly to yourself consistently, too?* We always encourage both.