

# The Science of Neuroplasticity

Shows us that **Recovery** is Possible – even **Years** after **Stroke** or **Brain Injury**

**neuroplasticity:** our brain's ability to continue to reorganize itself by **forming new neural connections** throughout life, which means that your brain can compensate for injury and adjust in response to new situations.

## The Key to Neuroplasticity is Practice



New **neural connections** can form at an amazing speed, but **in order to reconnect**, neurons need to be stimulated through activity.



Neural connections are formed with **specific brain exercise** and strengthened with practice. The **more you practice**, the better you get.

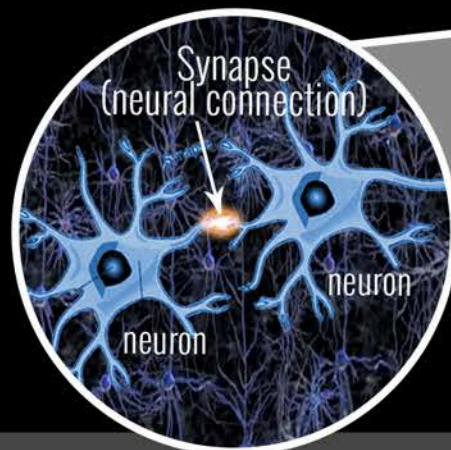
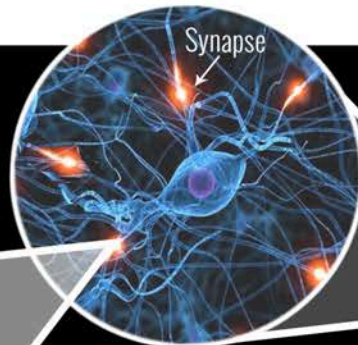


The key to neuroplasticity is targeting a skill over time. Strong neural connections are made with **frequency** and **consistency** of practice.



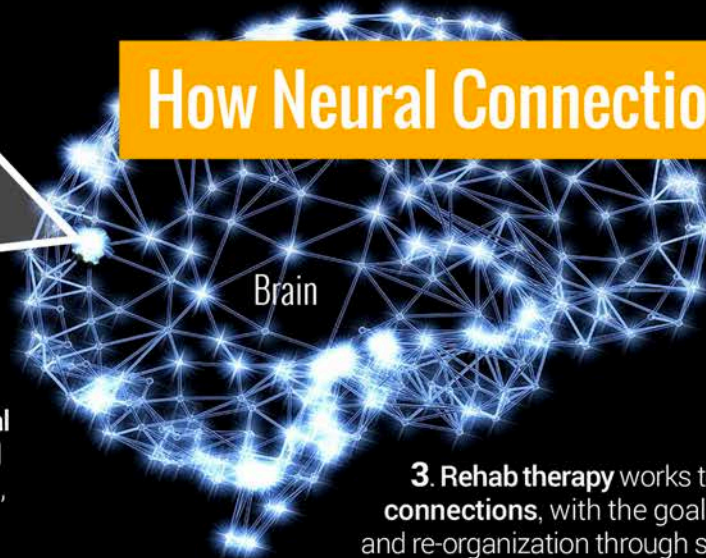
No matter when your brain injury occurred - last week or 10 years ago - **it's never too late** to form new neural connections to recover. Start practicing today!

1. A **neuron** is a nerve cell that processes and transmits information around our brains.



2. Neurons communicate with each other **at a synapse, making a neural connection**. Trillions of these neural connections facilitate our thinking, feeling & acting.

## How Neural Connections Are Made



3. **Rehab therapy** works to stimulate **new neural connections**, with the goal to promote self-repair and re-organization through specific brain exercises.