10 Neuroplasticity Exercises for Optimal Brain Health

The brain is responsible for critical life functions. It controls our breathing, heartbeat, digestion, and movement. It's also in charge of our mental abilities, known as our cognitive function. Thanks to the brain, we can learn, think, remember, make important decisions, and more.

But what happens if your cognitive function isn't as sharp as you'd like? You can change the brain's structure and function with neuroplasticity training. This helps it perform at optimal levels.

What Is Neuroplasticity?

Neuroplasticity refers to the brain's ability to adapt and change. It can do this both structurally and functionally. This is sometimes referred to as neural or brain plasticity.

The human brain contains more than 100 trillion synaptic connections. These connections allow neurons to communicate. They enable signals to travel throughout the nervous system. Some travel from one brain region to another via a neural pathway. There are a lot of neurons in the gray matter of the brain. This matter begins to form before birth. It increases in density in the adult brain until around age 20.

A damaged neuron in the central nervous system (brain or spinal cord) doesn't regenerate. Although, there are ways to strengthen existing neuronal connections. It's also possible to create a new neural connection or pathway. This can be accomplished due to synaptic plasticity. This plasticity allows for improved neuron communication along the connective pathway.

Neuroplasticity training is used to help people recover from a brain injury. This injury may stem from an accident, sports (such as enduring a concussion), or due to stroke. Neuroplasticity exercises help these individuals improve their cognitive function. They also promote optimal executive function in people without a brain injury.

Benefits of Neuroplasticity Training

Think of neuroplasticity training as strength training for your brain. Lifting weights improves muscle fitness and strength. Neuroplasticity exercises promote brain fitness. With each new neural pathway or connection, brain function improves. This provides numerous benefits.

- **It protects against cognitive decline**. Cognitive abilities naturally decline with age. It takes us longer to process our thoughts and memories start to fade. Neuroplasticity training can help protect our cognition as we grow older. This helps us maintain our independence.
- **It improves cognition with brain diseases**. Alzheimer's and dementia are brain-based conditions that affect a person's cognitive function. Research indicates that neuroplasticity training can help these individuals protect and restore their abilities.
- **We're able to make better decisions**. Neuroplasticity exercises enhance the brain's ability to make good decisions. We become more thoughtful about our choices. We can sort through our options with greater clarity.
- **We are more resilient against stress**. The flight-or-flight stress response is intended to protect us from harm. But when we endure chronic stress, our physical and mental health can suffer. It can also suffer in cases of post-traumatic stress disorder (PTSD). Studies have found that physical exercise improves neuroplasticity in people with PTSD. This highlights the ability of neuroplasticity training to positively affect our reactions to stress.
- **We have improved memory**. Mild cognitive impairment can make it harder to remember what we had for lunch. Or we might not recall where we placed a specific item. When impairment becomes more severe, we might forget our personal information or loved ones. Neuroplasticity is important for memory retention and recall. Neuroplasticity training helps protect these functions.
- **We have less brain fatigue**. Another reason to engage in this type of training is our brains don't fatigue as easily. This can be helpful when performing complex mental tasks. It can also make it easier to stay the course during endurance exercise.
- **We enjoy better mental health**. Our brain controls what we think and feel. Improving its function also improves our mental health. For instance, research suggests that neuroplasticity exercises can lower anxiety. Almost one in five adult Americans has an anxiety disorder. Therapy and medication are common anxiety treatments. However, neuroplasticity training is another way to relieve anxiety.

10 Neuroplasticity Exercises for Better Brain Function

Fortunately, you don't have to be in stroke recovery treatment or suffer a traumatic brain injury to gain the benefits of neuroplasticity training. There are

several neuroplasticity exercises you can do at home. Here are 10 to include as part of your brain training protocol.

#1: Play Games that Work Your Brain

Have you avoided downloading a Sudoku or crossword puzzle app because you're worried they'll eat into your productive time? Now you can permit yourself to enjoy these types of brain games. The more you use your brain power, the stronger it becomes. So, set aside time each day to do this type of neuroplasticity exercise. Any game that requires you to think can improve your brain function.

#2: Indulge in Strategy-Based Video Games

Video games are another good exercise for your brain. They force you to make quick decisions and deal with situations you may not have seen coming. Studies have also found that video games can increase gray matter in the brain. Games in 3D work best as 2D games haven't created such improvements.

#3: Get Creative

Another way to exercise your brain is to get in touch with your creative side. Do a form of art you enjoy. This may include painting, drawing, or something else. Let your mind expand into new areas. Release its confines and find ways to express yourself creatively.

#4: Practice Your Critical Thinking Skills

Thinking critically also promotes brain function. It forces you to look at things more in-depth versus accepting them at face value. Become curious about the world around you. Look at things from different viewpoints. Consider other opinions. Critical thinking makes you a better decision-maker. It also improves your understanding of yourself and others.

#5: Perform Visualization

This exercise involves training your brain with imagined scenarios. You may use visualization to increase your confidence in certain situations. Elite athletes often use mental imagery to improve their performance. Find a quiet place to sit and close your eyes. Imagine a situation you want to master. Maybe you want to improve your diet, for instance. Picture yourself making healthy food choices. Train your brain to take these actions automatically.

#6: Acquire a New Skill

Learning a new skill promotes brain neuroplasticity too. It works initially by creating new pathways and neuronal connections. As the skill is practiced, these connections strengthen. The stronger they get, the greater your skills become.

New skills to work on include those related to:

- Cooking
- Gardening
- Graphic design

#7: Grow Your Vocabulary

You can also improve brain plasticity by expanding your language skills. Learn new words and use them when communicating with others. If you're feeling super ambitious, you might even learn a new language. Download an app to learn Spanish, French, German, or another foreign language. You'll increase your brain's health while improving your communication skills at the same time.

#8: Use Your Non-Dominant Hand

If you really want to force your brain to work harder, don't use your dominant hand. In other words, if you're right-handed, use your left hand to eat or drink. If you're left-handed, use your right hand to draw. This type of exercise requires your brain to think more during these activities. The more it thinks, the stronger it becomes.

#9: Release Your Inner Musician

Research connects musical training with improved cognitive function. That makes this a good time to pick up that instrument you've been wanting to learn. You can find online videos that teach you how to play almost any instrument. Taking classes is another option. Even just listening to music can enhance neuroplasticity. Create your favorite playlist and know you're doing good for your brain.

#10: Engage in Mindfulness Meditation

Mindfulness involves being fully present. You're aware of yourself and everything around you. Studies connect mindfulness meditation with neuroplastic changes. It increases your attention while improving your overall well-being. To do it, simply practice situational awareness. Take a few minutes to pay attention to what you think and feel. Notice your environment, and how it sounds and smells.