

Strategies for Enhancing Cognitive Abilities With Multiple Sclerosis

Updated on December 27, 2021

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- Cognitive symptoms such as impaired attention and memory occur in many people with multiple sclerosis (MS).
- Science supports the use of cognitive behavioral therapy (CBT) and cognitive rehabilitation to help improve cognition in people with multiple sclerosis.
- There are things you can do at home to help with cognition, such as playing sudoku or video games that challenge your problem-solving abilities.

[Multiple sclerosis](#) often causes [cognitive symptoms](#) because it impacts the central nervous system, which includes the brain and spinal cord. If you have MS, you may have problems with cognitive functioning, including executive function — the mental skills you use to control behaviors and get things done. Forgetting simple things and being unable to follow directions can make daily life a challenge. Additionally, MS may slow down your brain's processing speed.

[Cognitive problems](#) occur in 40 percent to 65 percent of individuals with multiple sclerosis and typically cause impairments in attention, information processing speed, and memory. In cases of [relapsing-remitting multiple sclerosis](#), drug treatments may help stabilize and possibly improve cognition if the disease is caught early enough.

Cognitive behavioral therapy, exercise, and education programs may also help improve cognitive function and slow cognitive decline. [Cognitive rehabilitation](#) is another strategy that can help improve cognition through training and mental exercises.

If you're concerned about your cognitive abilities, talk to your doctor about [meeting with a](#)

neuropsychologist who can perform a formal cognitive evaluation, determine a baseline of your functioning, and help monitor your progress.

Try Cognitive Behavioral Therapy for Cognition

Cognitive behavioral therapy is a type of psychological treatment. It focuses on changing unhelpful thoughts and behaviors, improving emotional self-control, and developing coping strategies for stress and other challenges. CBT can help treat many conditions including:

- Depression
- Anxiety disorders
- Alcohol and drug-use problems

Evidence suggests CBT can help improve certain aspects of cognitive dysfunction as well. People with multiple sclerosis commonly experience fatigue, which can affect physical, mental, and social quality of life. However, studies have shown that CBT can help treat fatigue-related symptoms for people with MS. For example, CBT may be able to help improve attention in people with MS.

One MyMSTeam member asked, “Has anybody found cognitive behavioral therapy helpful in dealing with all the ‘stuff’ that came with our diagnosis of multiple sclerosis?” A member replied that CBT may be a good fit for those having short-term memory problems, while another member mentioned it’s important to find a therapist who’s knowledgeable about MS in particular.

Get More Physical Activity

Exercise may also affect the cognitive changes that can come with multiple sclerosis.

Physical activity can reverse some of the condition’s effects on the body. For example, MS leads to damage to the brain and nerve cells, but research shows that exercise helps brain cells regenerate and reorganize.

Exercise can help brain cells stay healthy by increasing levels of a chemical known as brain-derived neurotrophic factor (BDNF). BDNF is helpful in learning and remembering. Studies support the idea of using exercise to raise BDNF levels.

In one study, individuals with MS were found to have lower levels of BDNF in their blood compared to individuals without MS. After aerobic exercise, these BDNF levels increased. Additionally, physical activity may help improve MS symptoms, change brain activity, and slow down the progression of the disease. When people with MS increase their fitness levels, they may also have better executive function and cognition.

However, some MyMSTeam members disagree on whether exercise reduces or increases their fatigue. One member warned against overdoing exercise to reap the cognitive benefits while avoiding negative effects like fatigue. “Gentle and steady does it!” they said.

What strategies have you tried to improve cognition with MS?
Click [here to share](#) in the comments below.

Cognitive Rehabilitation

[Cognitive rehabilitation](#) is another method for boosting cognitive abilities. [Cognitive rehabilitation therapy](#) is mental training that helps keep cognitive abilities sharp. Training that improves cognitive function can significantly improve the quality of life of a person with MS.

This training encompasses [two types](#): restorative and compensatory. Restorative cognitive rehabilitation attempts to restore cognitive faculties that have been lost, while compensatory cognitive rehabilitation teaches strategies that compensate for cognitive impairment. Usually, therapists will employ both types to help people with MS.

[Examples](#) of restorative cognitive rehabilitation include performing increasingly difficult memory tests to improve their memory and undergoing training to improve their attention span. An [example](#) of compensatory cognitive rehabilitation includes using calendars to help keep track of tasks and events.

Although there have been some difficulties in studying the effectiveness of cognitive rehabilitation therapy (mostly due to differences in study methods used), research does seem to support that this type of therapy can improve [attention](#), [executive functions](#), and [memory](#).

Try Brain Exercises To Improve Cognitive Reserve

“Cognitive reserve” refers to the brain’s ability to adapt, improvise, and be flexible. In general, [research](#) shows that people who have [more years of education](#) tend to have more cognitive reserve and fewer negative MS-related cognitive symptoms, such as memory loss.

That said, people with less formal education derive the same benefits and increase cognitive reserve by doing other brain-challenging activities, like reading. Researchers have found that [reading challenging materials](#) can help improve skills in learning, memory, language, and problem-solving.

MyMSTeam members have discussed the best brain exercises to improve cognition and

retain memory. One member asked if anyone had tried Luminosity, a brain-training program that uses web and mobile games to challenge core cognitive abilities. “I feel like my brain keeps skipping, and I’m looking for brain exercises that might help,” they wrote.

One member replied that they used to use Luminosity often and that they noticed it helped with [brain fog](#). Other community members have found that Luminosity, card games, and sudoku help improve their cognitive performance.

There has also been interest in the use of video games to help people with MS. For instance, some researchers have focused on the use of the Nintendo Wii game system to help with multiple aspects of MS, [including reducing falls](#).

Importantly, these video games have also been shown to help with cognition. [One study](#) found that [Dr Kawashima’s Brain Training for Nintendo Switch](#) improved executive functions such as information processing speed and cognitive fatigue. In this study, participants were required to play 30 minutes per day, five days a week, for eight consecutive weeks.

Other Tips and Tricks To Improve Cognition

There are also other simple things you can do to improve your ability to think and remember. Some helpful tips include:

- Leave commonly used items in the same location (such as keys on a hook).
- Write down people’s names when you meet them.
- Remain socially active.
- When learning something new, give yourself extra time to practice.
- Use mental pictures to aid memory.
- Concentrate on the task in front of you.
- Set up a family calendar to track activities.
- Plan your most challenging cognitive tasks for the time of day you function best.
- Manage stress to the best of your abilities.
- Seek professional help when you need it.

Building a Community

[MyMSTeam](#) is the social network for people with multiple sclerosis and their loved ones. On MyMSTeam, more than 177,000 members come together to ask questions, give advice, and share their stories with others who understand life with multiple sclerosis.

Are you living with multiple sclerosis? Share your experience in the comments below, or start a conversation by posting on your [Activities](#) page.