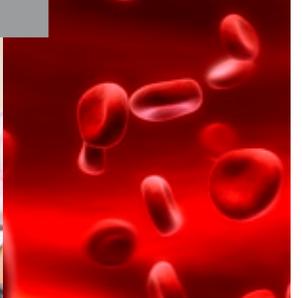
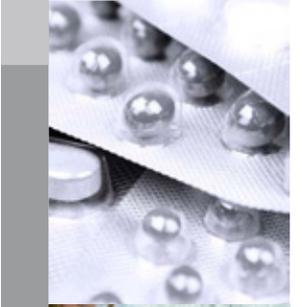




# *Brain fitness*



**intervene** & find out more

## What is it?

Use it or lose it! Mental exercises for Alzheimer's disease (AD) are not only a powerful preventative measure, they can slow down, halt or even help to reverse the disease. The good news is you're never too old to start boosting your brainpower.

The brain is like muscles in your body in that if you exercise it you can make it stronger, but if you don't it will get weaker. Unfortunately, normal day to day living doesn't always give you the mental stimulation you need.

### 50% Less Chance Of Getting AD

Studies have shown that staying mentally active can slash the chance of getting Alzheimer's disease by half! And the Daily Telegraph in the United Kingdom reported that volunteers 65 years old and over who did just ten hours of training their memory, problem solving and reaction times, had mental abilities equivalent to people seven to fourteen years younger than those who didn't do the mental exercises.

Even the education you get when you are young seems to have a big influence on your chances of getting Alzheimer's disease. A study carried out in China showed that illiterates were five times more likely to get AD than high school graduates. Another study, this time in Sweden showed that those with less than a grade eight education were two and a half times more likely to get AD.

### Even Early Education Pays

The higher the education you have when you are young, the lower the chance you'll get AD when you're old. The plaques and tangles in the brain (the physical signs of Alzheimer's) have less effect on the higher educated than the less educated.

Experiments have been carried out with rats that were given lead laced water to drink. Those living in a stimulating environment learnt better than those who were isolated.

It seems fairly conclusive that exercising your neurons keeps them functioning better. So what sort of exercises do you need to keep your brain tuned up and firing on all cylinders?

### Fun Mental Exercises

- + Mental exercises don't have to be boring; in fact they can be a fun and enjoyable part of the day.
- + Playing cards is a good exercise, and bridge is often mentioned as an exceptionally good card game for mental stimulation.

- + The solitaire games of FreeCell and Spider are good too. If they're not already on your computer you can download them for free. Work hard at keeping your percentage of wins up.
- + Try Sudoku, which is a Japanese number game that is very popular. You can find books of Sudoku puzzles quite easily, and often the local newspaper has games in it near the crossword puzzles.
- + Crossword puzzles and Scrabble are both good neuron sharpeners.

### Learn Something New

Keep Learning. Continuing education not only helps to keep Alzheimer's disease at bay, it's a good way to keep at the top in your profession or job.

## Why brain fitness exercises

As you get older, you have to keep your brain as fit as your body. Why is this? Aging doesn't just have an effect on our muscles, but our minds as well. Over time, our brain's ability to fight off the damage that aging does to our brains, which is known as the cognitive reserve – starts to fall off over time. Focusing and being able to perform actions can get harder as a result. Fortunately, you can make your brain stronger in much the same way as you strengthen your muscles – brain exercises are just like muscle exercises in that the more often you make use of them, the better your mental health will be.

### Alzheimer's Brain Exercises for Adults

If you can maintain the cognitive reserve of your brain, you can hold on to higher brain functions. With the help of these brain exercises, you can guard your memory and prevent neurological alterations that are caused by the onset of Alzheimer's disease and other signs of aging. There was a recent study performed on retired Catholic nuns that revealed that, despite the fact that they didn't show any symptoms of the disease, they still had the telltale lesions of the brain. However, since they devoted their lives to good diet, strong connections to their peers, and meditation, their cognitive reserve was in much better shape than most Alzheimer's patients. Even though they had Alzheimer's disease, their ability to function did not vary in the slightest.

## Get started

According to researchers, you can use several methods to get your cognitive reserve in good shape in a most effective way. Exercising your neurons every day and keeping your body in good condition through diet and exercise can help. When you want to keep your brain

healthy, lower your cholesterol, take in more antioxidants, and cut down the fat. Don't just eat better; guard your brain tissue by undergoing a regular exercise regimen. It's also important to always be stimulated and never be bored. Always strive to learn every single day; as you start to let boredom and disinterest set in, you'll begin to exacerbate the problem. Brains can start to atrophy if they don't do a lot of work. As a result, you might want to limit the amount of sedentary activity you do each day, as that can affect the health of your brain as well.

## **The Healthy Brain: A Multifaceted Approach**

Researchers believe that the most effective plan to increase your cognitive reserve is to stimulate your brain in several ways. That includes diet, exercise, and lifestyle factors, as well as the daily flexing of your brain's neurons.

### **11 Brain Exercises That Work**

Exercises to strengthen brain function should offer novelty and challenge — and they can be fun. "Almost any silly suggestion can work," says David Eagleman, PhD, neuroscientist and assistant professor at Baylor College of Medicine in Houston, Texas. "Drive home via a different route; brush your teeth with your opposite hand. The brain works through associations [which is why it's easier to memorize lyrics to a song than it is to try and remember the same words without music], so the more senses you involve the better."

Your morning newspaper is a great place to start. Simple games like Sudoku and word games are good, as well as comic strips where you find things that are different from one picture to the next. In addition to word games, the following exercises can help to sharpen your mental skills:

- + **Test your recall.** Make a list — of grocery items, things to do, or anything else that comes to mind — and memorize it. An hour or so later, see how many items you can recall. Make items on the list as challenging as possible for the greatest mental stimulation.
- + **Draw a map from memory.** After returning home from visiting a new place, try to draw a map of the area; repeat this exercise each time you visit a new location.
- + **Do math in your head.** Figure out problems without the aid of pencil, paper, or computer; you can make this more difficult by walking at the same time.
- + **Challenge your taste buds.** When eating, try to identify individual ingredients in your meal, including subtle herbs and spices.

- + **Take a cooking class.** Learn a new way to cook. Cooking uses a number of senses: smell, touch, sight, and taste, which all use different parts of the brain.
- + **Create word pictures.** Visualize the spelling of a word in your head, then try and think of any other words that begin (or end) with the same two letters.
- + **Learn a foreign language.** The listening and hearing involved stimulates the brain.
- + **Let the music play.** Learn to play a musical instrument or study music.
- + **Refine your hand-eye abilities.** Learn a new skill that involves fine-motor skills, such as knitting, drawing, painting, assembling a puzzle, etc.
- + **Engage your senses.** Try activities that involve as many of your senses as possible, such as gardening.
- + **Learn a new sport.** Take up an athletic exercise that utilizes the mind and body, like golf or basketball.

## *Brain Games for Alzheimer's*

People with any form of dementia, including Alzheimer's, may be able to slow the progression of the disease by exercising the brain. Below is a list of good games for the brain.

### **Crossword Puzzles**

Crossword puzzles are intellectually stimulating. They require several mental activities, including word skills, geometrical skills and logic. In addition to being easy to find, crossword puzzles are inexpensive. According to a study by Joe Verghese, a professor at Yeshiva University in New York, people who worked four or more crossword puzzles per week weren't as likely to develop Alzheimer's disease as those who did only one.

### **Word Find Games**

The brain is resilient and malleable, so people can slow down the progression of dementia and increase their cognitive ability by stimulating brain activity. One way is to do word find, or word search, games that involve hunting, comparing, spelling and logic. In addition to magazines and newspapers, there are entire books devoted to word find games.

### **Scrabble and Other Word Games**

Scrabble requires various forms of thinking, which exercises the brain. In addition to the logic of space and placement, spelling and rational thinking, it also provides additional opportunities for socializing, since it is a game

that involves multiple players. Having a Scrabble group helps alleviate loneliness and depression---side effects and frustrations of aging and feeling isolated. A daily game of Scrabble will help keep the aging mind sharp and give the person something to look forward to every day.

## Trivia Games

Trivia games like Trivial Pursuit, may help the Alzheimer's patient retain some brain function. Some of the best ones provide questions and answers from the person's younger days. Trivia games can be played with groups of friends or online.

## Other Games to Stimulate and Exercise the Brain

Many games stimulate the brain and keep it active. Strategy games, such as Sudoku, checkers and chess are excellent. Card games provide a combination of logic, planning and social skills. Even solitaire can help keep the mind focused and sharp. Video and computer games can also be stimulating brain activities to help slow down the progression of dementia associated with Alzheimer's. According to an article on the University of Connecticut Health Center website, the most important thing to do is exercise the brain.

## Ways to Exercise the Brain

Making sure that your brain has enough exercise and stimulation could be the key in ensuring you ward off diseases of the mind and enjoy optimum brain health.

### Play an Instrument

The Washington Post, in a recent article about preventing the onslaught of Alzheimer's and dementia, pointed toward playing an instrument as a way to keep your brain healthy and functioning well. The article, based on a study published in an issue of the Journal of the American Academy of Neurology, noted that neurologically stimulating activities, like reading music can help improve brain function.

### Do Something Differently

If you're the type of person who always brushes your teeth with your right hand, try switching to your left. The Franklin Institute notes that doing something differently causes your brain to switch out of "auto-pilot" and learn to adapt to a new way of doing something. Try switching the hand that you use to work your computer mouse, or take another route to your office to learn to do something new and keep your brain healthy.

## Complete a Brainteaser

The brainteaser that you find in your local paper isn't just to pass the time. Exercising your brain while looking for a solution can help you keep your mind sharp and healthy. Look for a crossword puzzle in the paper, buy a book of sudoku puzzles or help your child work on a problem for school for a quick, easy and satisfying way of exercising your brain.

## Get a Hobby

The Mayo Clinic points to hobbies as an ideal way to exercise your brain. A Mayo Clinic study of aging found that those individuals who had active hobbies like reading, crafting and other interests were 30 to 50 percent less likely to develop memory and cognitive impairment than those who did not. Pick up something that you've always wanted to do, and learn a new skill, like painting, knitting or poetry in order to keep your brain functioning well.

## Exercise Your Body

There is a direct correlation between the health of your mind and the health of your body, suggests Jacqueline Stenson, MSNBC contributor. A study published in the Proceedings of the National Academy of Sciences found that those who were more fit enjoyed a greater amount of brain health. Those who were physically fit also attained better productivity, and physically fit children did better academically. Each week, make sure you get the two hours and 30 minutes of exercise that the Centers for Disease Control and Prevention recommend for older adults.

## How to Boost Brainpower

The human brain is like a muscle in the sense that it responds positively to exercise and tends to atrophy when not used. This tendency is strong enough to result in lower rates of Alzheimer's disease among the highly educated, reports Margie Lachman, psychologist at Brandeis University. Although some brain functions decline with age, you can minimize any loss of function with a lifestyle that keeps your mind sharp and perhaps even enhances your current functioning, regardless of your educational level.

### Step 1

**Exercise regularly.** Exercise has been shown to enhance brain function and reduce the risk of Alzheimer's disease. Although you should exercise several times a week with enough intensity to break a sweat, you needn't train like an athlete.

## Step 2

**Keep busy.** Even activities that seem unrelated to brain training such as visiting friends, playing cards or going to the movies can keep the brain healthy, says neuropsychologist Yaakov Stern of Columbia University.

## Step 3

### **Perform activities that challenge your verbal activities, such as crossword puzzles and reading.**

Crossword puzzles can help keep your mind flexible because they require you to use existing information--the spelling of a word--in a new way, by comparing it with the spelling of another word. Reading is most effective if you read critically--by mentally questioning the author's implicit assumptions or reasoning in nonfiction, for example.

## Step 4

**Take a class.** Learning to play a musical instrument, especially if you compose your own music, can exercise your brain's quantitative abilities because of the mathematical structure of music. You may also want to consider studying a foreign language because speaking more than one language has been shown to slow the aging process.

## Step 5

**Eat a balanced diet.** Foods that are rich in antioxidants, such as broccoli, tomatoes and grapes, can enhance brain function, according to Molly Wagster, research director at the National Institute on Aging.

## *Brain Health Exercises*

There are steps you can take to ensure your brain remains healthy, according to the Alzheimer's Association. Brain exercises can improve brain functions and help to prevent dementia and other brain-related diseases.

### **Education**

The brain receives a workout whenever you engage in learning activities. Staying involved in school by taking adult education classes or ongoing training in a specific field helps to keep the brain healthy and can actually encourage new brain cell development. Learning new ideas and skills is an ongoing exercise that can reduce memory loss with age and improve overall brain health. The Alzheimer's Foundation reports that low levels of education are a risk factor in the development of Alzheimer's disease. The Franklin Institute reports that you must learn brand new skills on a regular basis to keep your brain healthy.

### **Chess**

Chess is a game of strategy that requires the brain to operate on a number of different levels. You must utilize spatial recognition to see all the players on the board as well as think ahead to the consequences of each move. According to Brain Metrix, chess is a game that also can increase intelligent quota, or IQ. The brain stores experience and information from playing the game repeatedly that improves your ability to play. Abstracts and structures inherent in the game increase the brain's ability to process complex ideas and thoughts. Play with someone who is a better chess player to intensify the brain workout or play chess with a computer module.

### **Challenges**

When people are young, everything is new and the brain is in a kind of mental Olympics, constantly being challenged with new concepts and skill sets that exercise the brain. With age, many skills become rote and do not involve the brain. To step up your brain activity, challenge yourself with simple tasks such as switching hands to work the mouse on your computer. According to the Franklin Institute, the simple act builds brain neurons. Try switching hands when brushing your teeth or working the remote control to keep the brain active. Break other routines by getting dressed with your eyes closed, drive a different route to work or try talking to someone using only visual communication.