



ALZHEIMER'S  
RESEARCH & PREVENTION  
FOUNDATION™

a 501(c)(3) charitable organization

Working Towards Prevention Since 1993

# The Power of Brain Aerobics: Maximize your Memory

Part of The 4 Pillars of Alzheimer's Prevention™  
Educational Material Series

[www.alzheimersprevention.org](http://www.alzheimersprevention.org)

*To achieve brain regeneration, I have discovered that you have to do more than just keep your brain healthy with nutritional therapy, physical exercise, stress management, and appropriate prescription medications.*

*You also need to carefully nurture your brain with vigorous mental exercise, what I call brain aerobics.*

*There are many activities you can do each day to improve your memory. This brochure will explore the benefits of exercising your brain.*

**Dharma Singh Khalsa, M.D.**

PRESIDENT / MEDICAL DIRECTOR — ARPF



In order to prevent further cognitive decline, you must take an active role in changing your lifestyle. Begin TODAY!

## Memory Loss and Aging

Memory loss is neither a normal nor a natural process of aging. The truth is that it really depends upon the attitude we have about our age. We must take a proactive role in retaining the strength and vitality of our brain as we age. Just as our body needs strength-building exercises to keep it fit, so does our brain... the most important life-giving organ.

The brain will go through natural changes as we age, but mental decline is preventable and even reversible with appropriate and adequate stimulation. Studies have shown that you can avoid mental aging by keeping your mind mentally active. Rigorous mental activity also helps improve the mind & memory of those who are starting to show signs of mental deterioration.

Think of how you practice physical aerobics in order to improve your cardiovascular health. You can also practice brain aerobics to maintain blood flow and oxygen to the brain to increase mental fitness. This is critical to keep your brain sharp as you age.

The proven fact is that certain brain-challenging activities will actually increase the size of your brain, the number of brain cells, and create new connections between these cells.

In fact, brain aerobics has been reported to reduce your risk of developing Alzheimer's disease by as much as 50-70 percent, according to some experts.

## Examples of Brain Aerobic Exercises:

- Volunteering
- Singing songs
- Memorizing lists
- Shopping by memory
- Learning a new language
- Discover computer brain training
- Discussing headlines and current events
- Engaging in music, art, and other hobbies
- Doing jigsaw puzzles and crossword puzzles
- Reading and then talking about what you read

## The important thing about mental activity is not what you do, but merely that you do *something*.

Try a different one each day and see how much your memory improves. Notice that reading the newspaper, talking about current events with a friend, playing along with Jeopardy and Wheel of Fortune, and then playing a game of Scrabble would give you about four hours of mental exercise in just one day!

### Try this Creative Brain Exercise:

Turn a book, or other printed material, upside down and read it out loud for ten minutes. You may notice that reading upside down takes a lot of concentration and focus. This is because it causes a visual workout, a verbal workout, and a perceptual workout, all at the same time. It is an all-around great activity to stimulate your brain.

## Adding Zest to Brain Aerobics

Everyone of a certain age remembers where they were on November 22, 1963 when President John F. Kennedy was assassinated. Today, we all recall where we were and what we were doing on 9/11. That's because these were tremendously emotional moments in our lives.

Although these particular events were tragic moments, they illustrate how emotion can help improve our memory. Attaching color, sound, and smell to your memories also works.

*Therefore, to boost your memory power, make these attachments. For example:*

- If you are following directions and need to turn onto Green Street and Windy Lane, picture a green meadow with a breeze rippling across it.
- Make acronyms by stringing the first letters of words together. If you meet Cathy, Amy, and Tracy, remember their names by remembering 'CAT.'



## Advice from Dr. Dharma

*“Everyone should spend at least 20 minutes, three times a week, doing mental exercise. That’s not very much time at all, considering how many ways there are to exercise your brain. In fact, you are probably already practicing quite a few mental exercises in your daily life and don’t even know it.*

*For example, you and your spouse or significant other can discuss a newspaper article, magazine article, movie you saw, or a book you are both reading. I call this activity ‘headline discussion.’*

*My advice is to become active as well as involved, and to discuss the things that you’ve done in detail with someone else. It will not only be beneficial to your brain, but you’ll enjoy it!*

*Moreover, discovering meaning in life and having passion and purpose has been revealed to actually decrease your risk of developing Alzheimer’s disease. In this way, you will claim the dual benefits of pleasure and optimal health.”*

## Think like Einstein!

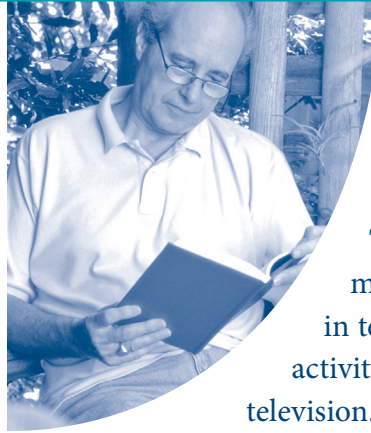
A fascinating report disclosed that the great thinker Albert Einstein, perhaps history's most brilliant man, had very normal brain cells.

After Einstein's death, a famous pathologist examined the professor's brain and noted that his brain cells, or neurons, were the same as ours. What was different was the supporting structure around his neurons. It was more developed than normal. This supporting structure, similar to your skeleton, is referred to as glial cells. The glial cells are critically important, because they support the connections, or pathways, between brain cells.

Studies show that a combination of physical and mental exercise creates more connections in the brain, so surrounding cells grow stronger and are more resistant to the effects of aging.

### Why do Alzheimer's researchers look at a person's education level?

Education improves cognitive abilities because learning increases the number of connections in our brain. Therefore, whether you are of school age, working or retired, doing things you have never done before (like learning computers or a new language) will improve your brain's function.



## Reading Stimulates Your Brain

The most common mistake people make in terms of mental activity is watching too much television. Watching too much television takes away from time that could be spent on activities, such as reading, that stimulate your brain.

Reading is uniquely beneficial for the brain, as it requires active engagement of the mind and imagination, powerfully stimulating both brain hemispheres.

The bottom line is that thinking can improve the connections in your brain and thus improve your memory. Almost any mental activity will fulfill the brain's needs, but the brain especially enjoys exercise in the areas of language, numbers, reasoning, and spatial organization.

The most productive exercises for these areas include reading, writing, drawing, playing word games, computer games and board games, conversing, engaging in stimulating hobbies, and especially volunteering.

## What are Brain Aerobics?

We tend to think a lot about physical fitness today, but mental exercise is equally important. For optimal brain health, it is proven that the best combination is to exercise physically 30 minutes, stretch, then follow with 15-20 minutes of mental exercise.

A healthy mind and body relationship is the key to unlocking, activating, and sustaining brain power for our entire lifetime.

Studies show that when people engage in moderate, pleasant forms of mental exercise, their knowledge, as well as the efficiency and power of their brains, increases.

Challenging the brain with novel tasks (anything new or different) improves brain function.

### In order for an activity to be considered brain aerobics, three conditions must be met:

- It needs to engage your attention.
- It must break a routine activity in an unexpected, nontrivial way.
- It must involve more than one of the senses.



## Pump Up Your Body and Brain

Brain aerobics, especially when combined with physical exercise such as walking, may actually regenerate brain cells. The most recent research reveals that you need 150 minutes a week of combined aerobic and strength training.

In addition to the tried and true methods of Brain Aerobics, such as cross word puzzles, we now know that certain computer games improve your brain function as well.

### Weekly Brain Aerobics Program

*Here is a week-by-week plan that combines brain aerobics and physical exercise:*

#### Week 1:

Yoga and meditation is a great brain-healthy way to start your day. Work a crossword puzzle. Later, go for a nice walk and sing your favorite song. Volunteer some of your time.

#### Week 2:

After meditation, go for a nice brisk walk with a companion. While you walk, discuss current events and sing three of your favorite songs. Memorize shopping lists and shop by memory.

#### Week 3:

Sing the national anthem as you walk or jog. Do a jigsaw puzzle and spend a couple of hours each day on a hobby. Read a book and discuss it with a friend.

#### Week 4:

Read a book while riding an exercise bike. Discuss it with a friend while exercising. Work on learning a new language or the computer.

## Keeping it Simple

Working brain aerobics into your day can be simple. Most mental exercises can be done any time, any place.

*Here are some ways to improve short-term memory and stretch your brain to its maximum:*

1. In your office or at home, open a drawer, find five to ten things and memorize them. Come back a few minutes later and write down what you memorized. Look in the drawer and check if you are correct.
2. While grocery shopping, go down the cereal aisle and memorize the first five cereals. Come back ten minutes later and see if you have remembered them correctly.
3. Look at the financial page of the newspaper. Memorize five of the stock quotes, then go and do something else. Come back five to ten minutes later and write the quotes down on a piece of paper. See how many you got right.

**Try this:** Take a small object, such as a key, pen, or pill bottle, and describe out loud every thing that you can about that object. Engaging all of your senses like this is a good way to stimulate your brain.

**Try this:** Use flash cards while you are participating in the four-week brain aerobics program and see how much your memory improves.

The ARPF is a 501(c)(3) non-profit organization dedicated to preventing Alzheimer's disease by funding research studies and providing educational outreach and memory screenings.

We believe that The 4 Pillars of Alzheimer's Prevention allow the greatest chance of preventing Alzheimer's disease. This approach utilizes the best of conventional medicine, combined with the best of integrative or holistic medical modalities such as diet, brain-specific nutrients, stress management, physical and mental exercise, and spiritual fitness.

Our mission is made possible by the generous contributions from people like you. *Thank you for your continued support!*

Discover more at:  
[www.AlzheimersPrevention.org](http://www.AlzheimersPrevention.org)  
or call 1-888-908-5766

P.O. Box 30783 | Tucson, AZ 85751-0783  
[info@alzheimersprevention.org](mailto:info@alzheimersprevention.org)



Follow us on Facebook:  
[facebook.com/PreventAD](https://facebook.com/PreventAD)

Twitter: [twitter.com/PreventAD](https://twitter.com/PreventAD)

YouTube: [youtube.com/user/preventalzheimers](https://youtube.com/user/preventalzheimers)



THE ARPF IS A PROUD MEMBER OF:



© 2007-2016 ARPF

To be reproduced with written permission only.



This eco-friendly brochure is printed using soy inks on 55% recycled fiber and processed chlorine free.

Printed in the USA