



ALZHEIMER'S  
RESEARCH & PREVENTION  
FOUNDATION™

a 501(c)(3) charitable organization

Working Towards Prevention Since 1993

# Mild Cognitive Impairment (MCI) & Early Alzheimer's Disease:

## Symptoms, Diagnosis and Treatment

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

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

*Henry is sixty-seven years old. He has been meeting his friends to play golf every Sunday for years, but this week he forgot.*

*More and more often, Henry finds himself in a store but can't remember what he needs to buy.*

*On Wednesday, he missed his daughter's birthday party.*

*He knows there is something wrong, but he doesn't know what it is.*

*Henry blames his forgetfulness on his age.*

*But is it more?*

## What is MCI?

Mild Cognitive Impairment (MCI) is a specific type of memory loss. People diagnosed with MCI have significant short-term memory loss. However, MCI does not necessarily impair a person's daily functioning.

Symptoms of MCI are less severe than Alzheimer's, because the brain is not damaged as extensively as when someone has Alzheimer's. The following chart reveals the difference between the symptoms of MCI and Alzheimer's.

| MCI Symptoms   | Alzheimer's Symptoms  |
|--|---|
| Almost normal general cognitive function<br><i>(thinking, understanding and decision-making)</i> | Impairment in cognitive functions<br><i>(thinking, understanding and decision-making)</i> |
| Near normal activities of daily living   | Impairment in normal activities of daily living   |
| Little or no personality change  | Personality changes   |
| Memory impaired, for similar age   | Memory impairment<br>Judgement impairment   |
| May not progress   | Progressive loss of function  |

Many people with MCI may retain sharp thinking and reasoning skills. They can manage their finances, and can easily recall events from the past, but may have severe short-term memory loss. Family and friends may notice these changes.

## What are the Symptoms of MCI?

The two main symptoms that need to be present in order for a person to be diagnosed with MCI are:

- 1. Memory complaint**
- 2. Some form of other neurological difficulty** (language, a problem with motor activity, a problem with sensation, or difficulty performing executive functions)

In addition to having these symptoms, the two elements, combined, need to be significant enough that they affect a person's social or occupational life.

## What are the Symptoms of Early Alzheimer's Disease?

The main symptoms of Early Alzheimer's are:

- 1. Short-term memory loss and confusion with time or place**
- 2. Judgement impairment, difficulty planning**
- 3. Personality disturbances and withdrawal**
- 4. Some form of other neurological difficulty** (language, a problem with motor activity, a problem with sensation, or difficulty solving problems)
- 5. Problems expressing yourself**

## Why Should I be Concerned About MCI?

People with MCI are at a higher risk for progressing to Alzheimer's disease.

In fact, MCI has been shown to develop into Alzheimer's disease at a rate of 12%–15% per year, if lifestyle changes are not implemented and measures are not taken to slow its progression.

The great Dr. Charles Mayo, one of the founders of the Mayo Clinic, said ***“That which can be foreseen, can be prevented.”***

The key to treating MCI, which can eventually lead to Alzheimer's, is to prevent its progression.

If you are experiencing symptoms of MCI or Early Alzheimer's Disease, take steps TODAY to prevent further cognitive decline!

With lifestyle change, you can delay the full onset of Alzheimer's disease long enough to perhaps never develop its devastating symptoms.

Quiz at right reproduced from the book *Brain Longevity* ▶ by permission of the author Dharma Singh Khalsa, M.D.

## Memory Quiz

Are You Experiencing Memory Problems?

### Instructions:

For each of the following statements, check a “T” in the box if the statement is true or “F” if it is false. Count up the number of “T”s to get your score\*

|    | T                        | F                        |   |
|----|--------------------------|--------------------------|---|
| 1  | <input type="checkbox"/> | <input type="checkbox"/> | My memory is not as good as it used to be.                      |
| 2  | <input type="checkbox"/> | <input type="checkbox"/> | It's harder to do mental calculations than it used to be.       |
| 3  | <input type="checkbox"/> | <input type="checkbox"/> | It's more difficult to concentrate than it used to be.          |
| 4  | <input type="checkbox"/> | <input type="checkbox"/> | I often feel fuzzy headed.                                      |
| 5  | <input type="checkbox"/> | <input type="checkbox"/> | I can't handle stress as well as I used to.                     |
| 6  | <input type="checkbox"/> | <input type="checkbox"/> | I get depressed more often than I used to.                      |
| 7  | <input type="checkbox"/> | <input type="checkbox"/> | At the end of the day I feel more exhausted than I used to.     |
| 8  | <input type="checkbox"/> | <input type="checkbox"/> | I often have a ringing sound in my ear.                         |
| 9  | <input type="checkbox"/> | <input type="checkbox"/> | I often feel jittery and irritable.                             |
| 10 | <input type="checkbox"/> | <input type="checkbox"/> | It is more difficult to learn new things than it used to be.    |
| 11 | <input type="checkbox"/> | <input type="checkbox"/> | I sometimes get lost while driving familiar routes.             |
| 12 | <input type="checkbox"/> | <input type="checkbox"/> | I often tell the same stories over and over to the same people. |
| 13 | <input type="checkbox"/> | <input type="checkbox"/> | I sometimes get confused over what time it is or where I am.    |
| 14 | <input type="checkbox"/> | <input type="checkbox"/> | I often forget important appointments.                          |
| 15 | <input type="checkbox"/> | <input type="checkbox"/> | Lately, I have had difficulty naming familiar objects.          |

\*SCORES: (5-8) Your brain is functioning okay. By learning to relax and by maintaining a healthy diet, your brain can function at even higher levels.

(9-12) Your brain is in danger. Check your diet today. You can reduce brain drain with vitamins, brain foods, herbs, yoga & meditation, and appropriate medications.

(12-15) Your brain is running on empty. You should see your doctor. You can refuel your brain with food, vitamins, herbs, exercises, & medications.

## Are there Risk Factors for MCI and Alzheimer's Disease?

*There are a number of risk factors that lead to cognitive decline.*

*The main factors are:*

### 1. Age

With increasing age, there is a greater incidence of cognitive decline.

### 2. Family history

If someone's first-degree relative (mother, father, or sibling) has Alzheimer's, the chances are up to seven times greater that they may develop the disease.

### 3. Genetic predisposition

A person with two APOe-4 genes is at a higher risk of developing Alzheimer's disease later in life.

### 4. Other

Cardiovascular disease, strokes, diabetes, head injury, and other lifestyle risk factors.

However, many risk factors can be controlled by making lifestyle changes.

*The three most important risk factors that can be controlled or improved by lifestyle changes are:*

1. Diabetes
2. High Stress
3. Heart Disease

## Is Prevention Possible?

Since the year 2000, there's been a vast amount of new medical research clearly demonstrating the power of prevention.

Each of us can proactively impact the health of our brain because it is a flesh-and-blood organ that depends on the nourishment of oxygen, blood flow, glucose, nutrients, and energy, just like the rest of the body.

*These are The 4 Pillars of Alzheimer's Prevention™, which also keep your brain sharp with age:*

### 1. Diet and Vitamins

You must feed your brain. A diet of 15 to 20% good fat, along with memory-specific supplements, is critical to maintaining optimum brain health.

### 2. Stress Management

It is imperative that you dissolve the stress in your life because chronic, unbalanced stress raises the levels of the memory-robbing chemical, cortisol, in your blood. Cortisol acts like battery acid on the brain. It has an extremely toxic effect and can cause memory loss by killing brain cells.

The practice of morning yoga and meditation helps reduce high levels of stress and increase production of good brain chemicals.

It also promotes focus, attention, and concentration. It works best when practiced on a regular basis.

Please see the results of ARPF research on the Kirtan Kriya memory meditation for more information on this Pillar.

### 3. Exercise

#### a) Physical

Physical exercise is an important prevention tool because it increases blood flow to the brain, allowing oxygen and nutrients to reach each living cell.

#### b) Brain Aerobics

Mental exercises, such as crossword puzzles and other memory-enhancing games, help maintain a sharp memory. *Use it or Lose it* is true! A good time for mental exercise is after physical or mind / body exercise. Please see the ARPF *Brain Aerobics* brochure for more information and tips on this topic.

### 4. Spiritual Fitness

Spiritual fitness is a new concept that incorporates psychological well-being with having a sense of spirituality or heightened consciousness, regardless of its origin. In promising studies, people who reported a feeling of purpose in life, as well as a social network and support system, acceptance and a feeling of independence showed improved cognition and genetics, and a reduction of Alzheimer's risk factors. Please see our brochure *The 4 Pillars of Alzheimer's Prevention* to learn more about this Pillar.

## How's Early Alzheimer's Disease or MCI Diagnosed?

Your doctor may refer you to a neurologist who will probably perform an extensive interview. The neurologist may also question someone close to you about any recent changes in your memory, behavior, and personality.

Questions may also be asked about your medical history, medications you take, and any history of stroke, head trauma, depression, alcohol abuse, or other possible neurologic disorders. These things can all affect memory and may cause symptoms similar to MCI.

Your neurologist may also perform one or more of the following medical tests:

### A Memory/Neuropsychological test

Your doctor may conduct other interviews and tests to assess your level of cognitive function. The tests may evaluate learning, attention, language, memory recall, and ability to reason. The results will be compared to those from people of similar age and education levels.

It is **extremely important** to diagnose MCI and Early Alzheimer's Disease at beginning stages because the treatments currently available yield better results when the disease has not yet progressed.

### Neuroimaging

These may include a magnetic resonance imaging scan (MRI), a computerized tomography scan (CAT or SPECT), or a newer PET scan. Moreover, scans to look for specific Alzheimer's changes, such as amyloid plaque, are becoming available. Scans may allow your doctor to evaluate important areas and identify any abnormalities that may be present in your brain. *(The scan may be repeated at a later time for comparison purposes.)*

Additional tests may be performed to rule out other causes for your condition and to help obtain a better overall assessment.

### Early treatment strategies include:

1. Initiating lifestyle measures, such as The 4 Pillars, to possibly slow the progression of cognitive decline.
2. Use of medication, as appropriately prescribed by your healthcare professional.
3. Make arrangements for as much personal/caregiving help as needed.

There is a considerable amount of research, attention, and financial support being directed towards Alzheimer's disease. It is our hope that, in the coming years, this will result in a major breakthrough to conquer this devastating, mind-robbing disease.

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)



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