What is cognitive aging?

Like other organs, the human brain changes with age in both its physiological structures and its ability to carry out various functions. The brain is responsible for “cognition,” a term that includes memory, decision making, processing speed, wisdom, and learning. As a person ages, these functions may change—a process called “cognitive aging.”

Cognitive aging is not a disease. In fact, it is a process that occurs in every individual, beginning at birth and continuing throughout the life span. There is tremendous variability in how people’s cognition changes as they age. Some older adults may experience very few effects from cognitive aging, while in others the effects may be more pronounced. Furthermore, an individual’s cognitive function may vary from one day to another.

Aging can affect the cognitive abilities needed to perform daily tasks, such as paying bills, driving, following recipes, and adhering to medication schedules. It can challenge an older person’s ability to live independently, pursue favorite activities, and maintain a sense of identity. As a result, some older adults are reluctant to tell loved ones or care providers when they experience change in their cognitive function.

But there are actions individuals and their families can take to support and promote their cognitive health and to adapt to age-related cognitive changes. It is important to overcome stigma and misconceptions that might prevent older adults from seeking resources that can help promote their cognitive health and overall quality of life.

Cognitive aging is not the same as Alzheimer’s disease.

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<thead>
<tr>
<th>ALZHEIMER’S DISEASE</th>
<th>COGNITIVE AGING</th>
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<tr>
<td>Chronic neurodegenerative disease</td>
<td>Part of aging</td>
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<tr>
<td>Extensive neuron loss</td>
<td>Neuron number remains relatively stable, but neuronal function may decline</td>
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<td>Affects approximately 10 percent of older Americans</td>
<td>Occurs in everyone, but the extent and nature of changes varies widely</td>
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<tr>
<td>Declines are often severe and progressive</td>
<td>Changes are variable and gradual</td>
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**MISCONCEPTION** | **FACT**
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Maintaining cognitive health means preserving your memory. | Cognitive health is far more than having a good memory. It also involves decision making, attention, and problem solving.
Cognitive function always declines with age. | Aging can have both positive and negative effects on cognition. Wisdom and expertise can increase with age. Older adults experience fewer negative emotions, such as anger and worry, than people in young adulthood and middle age, and they report feeling greater satisfaction with life in general.
There’s nothing you can do to improve your cognitive health. | There are actions individuals and families can take to help support their cognitive health and adapt to age-related cognitive changes. See the next page for more information.
Brain neurons die as you age, so there is no way to prevent cognitive decline. | In the absence of disease, neuron death is minimal. There are a number of actions you can take to support your cognitive health.

**RESOURCES RELATED TO OLDER ADULT DRIVING**

Safe driving relies on many elements of cognition, such as processing speed, decision making, multitasking, and memory. All of these functions can decline with age. Deciding whether to limit driving or stop altogether can be a difficult decision for older adults and their families because it can affect self-esteem and the ability to live independently.

However, there are many resources to help older adults drive safely or determine when it might be necessary to limit driving. For example, the American Automobile Association offers a defensive driving course called RoadWise Drive. The California Department of Motor Vehicles provides a 15-question online self-assessment to help older drivers and their families determine whether they are driving safely, and other states and organizations offer similar opportunities for assessment, as well as resources for decision making.

Visit www.iom.edu/cognitiveaging to access a list of online resources about older adult driving.
The top 3 actions you can take to help protect your cognitive health as you age

1. **Be physically active.** Staying physically active can promote cognitive health in middle-aged and older adults.

2. **Reduce your cardiovascular risk factors (including hypertension, diabetes, and smoking).** Maintaining cardiovascular health supports cognitive health.

3. **Manage your medications.** A number of medications can have a negative effect on cognitive function when used alone or in combination with other medications. The effects can be temporary or long-term. It’s important to review all of your medications with a health care professional and learn about their effects on cognitive health.

**Other actions that may promote cognitive health**

- Be socially and intellectually active, and continually seek opportunities to learn.
- Get adequate sleep and seek professional treatment for sleep disorders, if needed.
- Talk to your health care provider to learn more about preventing delirium (a decline in cognitive function that can be associated with some medications and hospitalization).
RESOURCES RELATED TO COGNITIVE AGING AND FINANCIAL DECISION MAKING

Age-related declines in cognitive function may make older adults vulnerable to financial fraud or abuse at a time when significant financial decisions need to be made, such as planning for retirement. In 2010 alone, victims of elder financial abuse lost an estimated $2.9 billion, which includes loss of money and goods to legitimate businesses, scams, family, and friends and indirectly through medical insurance fraud. According to the National Council on Aging, the top 10 financial scams targeting older adults include telemarketing, Internet scams, and sales of anti-aging products.

Fortunately, there are many resources available to raise awareness and help older adults, their families, and financial advisers avoid abuse and make sound financial decisions, including AARP’s “Scam Jams” and “Fraud Watch Network,” the Consumer Financial Protection Bureau’s Office of Financial Protection for Older Americans, and the Federal Trade Commission’s “Pass It On” financial fraud campaign.

Visit www.iom.edu/cognitiveaging to access a list of resources related to cognitive aging and financial decision making.