What is dementia?
When medical professionals use the term “dementia,” it refers to a brain problem that makes it difficult for a person to complete daily tasks without help. Symptoms of dementia vary from person to person and may include memory problems, mood changes, or difficulty walking, speaking, or finding your way. There are many causes for dementia; Alzheimer’s disease is one of them.

What is Alzheimer’s disease?
Alzheimer’s disease (AD) is a brain condition that causes changes in the brain. For many people, AD starts with changes in memory, but some people with AD also have changes in language, mood, visuospatial or thinking skills.

What causes AD?
The cause of AD is unknown. Scientists know that in AD there is a large build-up of proteins called amyloid and tau within brain cells. These proteins occur normally, but we do not yet understand why they build up in large amounts. As more and more proteins form in brain cells, the cells lose their ability to function and eventually die. This causes the affected parts of the brain to shrink.

How is age related to AD?
Most people with AD start having symptoms after age 65, although some people have shown signs as early as age 40.

What happens in AD?
For many people the first sign of AD is a change in memory, but others may have changes in mood, language, or thinking skills. For example, some people with AD may have trouble remembering to pay the bills. Others may have more trouble with planning, organizing, difficulty finding the right words, or becoming lost in familiar environments. AD can also affect a person’s mood, and people with AD may become depressed, anxious, paranoid, or irritable.

People with AD gradually need more help from others to complete their daily tasks. They may need help paying their bills, shopping, taking their medications, or remembering appointments. Late in the disease, people may need help with bathing and dressing.

A person with AD can live many years with the disease. Research suggests that a person with AD may live from eight to 20 years or more, although this can vary from person to person.

Are there medicines to treat AD?
Though there is no cure for AD yet, there are medications that help manage the symptoms. These medications are called cholinesterase inhibitors, and they can help a person with AD manage their memory problems. They work by slowing down the worsening of memory problems, but they may not reverse them. Some examples of cholinesterase inhibitors are donepezil and rivastigmine. People with AD can have mood changes, such as depression or irritability. These can be managed by medications like the ones used for depression or anxiety.

What other things help?
In addition to medications, there are various ways to help a person with AD. Research has shown that physical exercise helps to enhance brain health and improves mood and general fitness. A balanced diet, enough sleep, and limited alcohol intake are other important ways to promote good brain health. Other illnesses that affect the brain, such as diabetes, high blood pressure, and high cholesterol, should also be treated if present.

Resources
Alzheimer’s Association: alz.org
Alzheimer’s disease Information and Support: alzheimers.gov
Family Caregiver Alliance: caregiver.org
National Institutes of Health: nih.gov
Research: clinicaltrials.gov

Media
“What is Alzheimer’s disease?” From The TED-Ed Organization: youtube.com/watch?v=yJXTXN4xrI8

More from Alzheimer’s Association Green-Field Library: a10075.eos-intl.net/a10075/opac/search/specialtitles.aspx

From the MAC YouTube Channel: youtube.com/watch?v=bF3w2bXH7H4 youtube.com/watch?v=8FVK5a3VZI

Models for illustrative purposes only.
Alzheimer’s disease

Healthy brain

Cerebral cortex: Responsible for language and information processing

Alzheimer’s disease brain

The cortex shrivels up, damaging areas involved in thinking, planning and remembering

Ventricles filled with cerebrospinal fluid grow larger

Hippocampus: Critical to the formation of new memories

Hippocampus shrinks severely

Source: Alzheimer’s Association

Source: Memory & Aging Center