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The disease was first identified by Dr. Alois Alzheimer in 1906. He described the two hallmarks of the disease:

- **"Plaques"** (numerous microscopic dense deposits scattered throughout the brain). These plaques are largely made of a protein called “beta amyloid,” or A-beta. When A-beta molecules accumulate and stick together, it is toxic to brain cells.
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As Alzheimer's disease progresses and affects different areas of the brain, various abilities and behaviours become impaired. Once an ability is lost, it is not known to return. However, research is now suggesting that some relearning, and even recovery of memory, may be possible.

### The effects of Alzheimer's disease
Alzheimer's disease is a fatal disease that eventually affects all aspects of a person's life: how they think, feel, and act. Each person is affected differently. It is difficult to predict which symptoms he will have, the order in which they will appear, or the speed of their progression. Early signs that may signal the onset of Alzheimer's disease include the loss of sense of smell, and loss of weight. The following are some of the changes you may expect as the disease progresses.

### Cognitive and functional abilities
A person's ability to understand, think, remember and communicate will be affected. The ability to make decisions will be reduced. Simple tasks that have been performed for years will become more difficult or be forgotten. Confusion and memory loss, initially for recent events and eventually for long-term events, will occur. The ability to find the right words and follow a conversation will be affected. Sometimes people lose their way, even when walking in familiar surroundings. The very earliest of these cognitive changes often occur a few years before dementia is actually diagnosed. These early changes are known as “Mild Cognitive Impairment” (MCI); however MCI does not always progress to Alzheimer's disease.

### Emotions and moods
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### Forms of Alzheimer's disease

#### Familial Alzheimer's disease (FAD)
A small percentage of people with Alzheimer's disease (< 5%) have Familial Alzheimer's disease or FAD (formerly known as “early onset Alzheimer's disease”). At some point in their family history certain genes mutated and developed the abnormal characteristics that cause FAD. Familial Alzheimer's disease runs in families. If a person has familial Alzheimer's disease, each of his/her children has a 50% chance of inheriting the disease-causing gene and developing Alzheimer's disease. These inherited genes differentiate FAD from the more common sporadic form of Alzheimer's disease, but the disease itself is nearly identical.

#### Sporadic Alzheimer's disease
The most common form of Alzheimer's disease is called sporadic Alzheimer's disease; it has no specific family link. Sporadic Alzheimer's disease is due to a complex combination of our genes, our environment, and our lifestyle.

Sporadic Alzheimer's disease usually does not run in families. However, people who have a family history of sporadic Alzheimer's disease have a greater chance of developing the disease than people with no family history of Alzheimer's disease.

### Behaviour
Changes will develop in the way the person reacts to the environment. These reactions may seem out of character. Some common reactions include repeating the same action or words, hiding possessions, physical outbursts and restlessness.

### Physical abilities
The disease can affect a person's physical coordination and mobility, leading to a gradual physical decline. This will affect her ability to independently perform day-to-day tasks such as eating, bathing and getting dressed.

### Research, treatment and strategies
It may take years for the sick nerve cells in the brain to die. During that period treatments can help the affected nerve cells to maintain their communication with other nerve cells. It is the loss of this communication that causes the first symptoms of Alzheimer's disease to appear.

Significant advances in these treatments can have an impact on an individual's day-to-day life. Several medications now available can help with symptoms such as decline in memory, language, thinking abilities and motor skills.

Earlier diagnosis can mean that these treatments are started in the early stages, and improve the quality of life for many people.
What we know about dementia and Alzheimer's disease

Alzheimer’s disease is the most common of a large group of disorders known as “dementias.” It is an irreversible disease of the brain in which the progressive degeneration of brain cells causes thinking ability and memory to deteriorate. Alzheimer’s disease also affects behaviour, mood and emotions, and the ability to perform daily living activities.

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Alzheimer’s disease is a fatal disease that eventually affects all aspects of a person’s life: how they think, feel, and act. Each person is affected differently. It is difficult to predict which symptoms he will have, the order in which they will appear, or the speed of their progression. Early signs that may signal the onset of Alzheimer’s disease include the loss of sense of smell, and loss of weight. The following are some of the changes you may expect as the disease progresses.

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