



## Causes and Risk Elements of Alzheimer's Disease

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### DESCRIPTION

It is a degenerative neurologic illness that causes the brain to shrink and brain cells to die. Alzheimer's disease is the most prevalent cause of dementia, and it is characterized by a progressive decrease in mental, behavioral and social skills that impairs a person's capacity to operate independently.

### CAUSES

The specific causes of Alzheimer's disease are unknown. However, at a fundamental level the brain proteins fail to function appropriately, which disturbs the operation of brain cells and sets off a chain of harmful events. Neurons are injured, lose connections and eventually die.

Alzheimer's disease is caused by a mix of hereditary, lifestyle and environmental factors that gradually impair the brain. The damage usually begins in the part of the brain that governs memory, although the process begins years before the first symptoms appear. The loss of neurons spreads to other areas of the brain in a rather predictable fashion. The brain has shrunk greatly by the late stage of the disease.

### RISK ELEMENTS OF ALZHEIMER'S DISEASE

The most significant recognized risk factor for Alzheimer's disease is age. Alzheimer's disease is not a normal part of ageing, yet getting older may raise the chances.

#### Family history and genetics

Most genetic mechanisms of Alzheimer's disease in families are still completely unknown, and genetic variables are likely to be complex. Scientists have uncovered mutations in three genes that practically guarantee that everyone who inherits one of them would develop Alzheimer's disease.

#### Down syndrome

Alzheimer's disease affects a substantial number of people with

Down syndrome. This is most likely owing to having 23 pairs of chromosomes and hence three copies of the gene for the protein that causes beta-amyloid to develop. Alzheimer's disease symptoms appear 10 to 20 years earlier in people with Down syndrome than in the general population.

#### Sex

There appears to be minimal difference in risk between men and women, but women are more likely to get the condition than males since they live longer.

#### Mild Cognitive Impairment (MCI)

Mild Cognitive Impairment (MCI) is defined as a decline in memory or other thinking skills that is greater than usual for a person's age but does not preclude a person from functioning in social or work settings. MCI patients are at a high risk of getting dementia. When memory is the predominant MCI weakness, the condition is more likely to proceed to dementia caused by Alzheimer's disease. A diagnosis of MCI requires a greater emphasis on healthy lifestyle modifications, the development of techniques to compensate for memory loss and the scheduling of regular doctor consultations to check symptoms.

#### Head trauma

People who have suffered a severe head injury are more likely to develop Alzheimer's disease. Several big studies indicated that patients aged 50 and up who experienced a Traumatic Brain Injury (TBI) had an elevated risk of dementia and Alzheimer's disease. People with more severe and multiple TBIs are at a higher risk. According to some research, the risk is greatest between the first six months to two years after a TBI.

#### Drinking too much alcohol

It has long been known that excessive alcohol use causes brain alterations. Several big research and reviews discovered a link between alcohol use problems and an increased risk of dementia, particularly early-onset dementia.

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