

## AUTUMN LEAVES LEARNING SERIES

# CAN YOU INHERIT ALZHEIMER'S OR OTHER FORMS OF DEMENTIA? CAN YOU PREVENT THEM?



Caring for a loved one with Alzheimer's or another form of dementia can be stressful enough. On top of that challenge, you may also be worrying and wondering: Can I inherit the disease? Are my children at risk later in life? And is there anything I can do to prevent Alzheimer's or dementia?

Unfortunately, the answers are not always clear. Scientists don't yet fully understand what causes Alzheimer's disease and many forms of dementia. But here's what we do know.

### **GENES DO PLAY A ROLE IN THE DEVELOPMENT OF ALZHEIMER'S.**

That doesn't necessarily mean you will inherit Alzheimer's if you have a parent with the disease, nor does it mean that, if you have no relatives with Alzheimer's, you are entirely "safe."

Early-onset Alzheimer's is relatively rare – less than 5% of those with the disease – but most cases of this form of Alzheimer's are inherited. A child whose mother or father carries the genetic mutation associated with familial Alzheimer's disease has a 50/50 chance of inheriting the mutation. If that gene is present, the person is almost certain to develop the disease. (It is possible to determine whether a person carries the gene, but that step should be taken only with the guidance of a genetics counselor.)

### **THE CONTRIBUTION OF GENETICS IS LESS CLEAR IN LATE-ONSET ALZHEIMER'S, WHICH DEVELOPS AFTER AGE 60.**

According to the National Institute on Aging (NIA), the causes of late-onset Alzheimer's are likely to include a combination of genetic, environmental, and lifestyle factors that influence a person's risk for developing the disease. Researchers

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## UNDERSTANDING MIDDLE-STAGE ALZHEIMER'S AND DEMENTIA

have not found a specific gene that causes the late-onset form of the disease, but there are a number of genes that may increase a person's risk.

Some of these genes may be detected through a blood test, but cannot predict who will or will not develop Alzheimer's disease. "It is unlikely that genetic testing will ever be able to predict Alzheimer's with 100% accuracy, because too many other factors may influence its development and progression," according to the NIA.

For other types of dementia, the role of genetics varies widely. There are no established direct genetic causes for the more common forms of vascular dementia, for example, but fronto-temporal dementia (FTD) often runs in families; about one third of people with it have a family history.

To get information specific to you and your family's situation, your best option is to consult a medical professional or a genetic counselor.

### CAN YOU PREVENT DEMENTIA?

There is no definitive evidence yet about what can prevent Alzheimer's or age-related cognitive decline, according to the National Institute on Aging. But most doctors will tell you that "What's good for your heart is also good for your brain." Exercising, eating a healthy diet, maintaining a healthy weight and not smoking might have a beneficial effect.

Staying socially connected with family and friends and keeping your brain engaged through intellectually stimulating activities are also associated with a lower risk of Alzheimer's disease. Researchers think these may help establish a "cognitive reserve" that allows older people with dementia to function more effectively for a longer period of time even after some brain function is lost.

As we learn more about the role of lifestyle and diet in the risk of Alzheimer's or other forms of dementia, health experts encourage all adults to: exercise regularly, eat a healthy diet rich in fruits and vegetables, engage in socially and intellectually stimulating activities, keep cholesterol and blood pressure levels lower, control Type 2 diabetes, maintain a healthy weight, stop smoking, and get treatment for depression. These steps may help stave off dementia and will certainly help maintain your overall health.

### Additional reading:

Preventing Alzheimer's: What Do We Know?

<http://www.nia.nih.gov/alzheimers>

The Alzheimer's Association's Research Center

<http://www.alz.org/research/>