



# Let's Talk About Genetics



A specific gene mutation that will cause you to get Alzheimer's is only found in early onset Alzheimer's. This is known as familial Alzheimer's.

Only 5% of this Early Onset population will have Familial Alzheimer's.

The genetics that impact your chances to get Regular Onset Alzheimer's are associated with risk factor and are not a guarantee that you will develop Alzheimer's.

Apolipoprotein E (ApoE) is a class of protein involved in metabolism of fats in the body. There are 3 types of this gene called alleles: ApoE<sub>2</sub>, ApoE<sub>3</sub> and ApoE<sub>4</sub>.

Everyone has 2 copies of this gene and the combination are what determine your risk factor.

## What does this mean?

The ApoE<sub>2</sub> allele is the rarest form and carrying even only 1 copy reduces your risk of developing Alzheimer's by 40%.

The ApoE<sub>3</sub> allele is the most common type and is neutral, meaning it doesn't seem to impact your risk factor either way.

The ApoE<sub>4</sub> allele increases the risk of Alzheimer's and lowers the age of onset. Having 1 copy can increase your risk by 2-3 times, have 2 copies can increase your risk by 12 times. Only 10-15% of the population has the ApoE<sub>4</sub> allele.