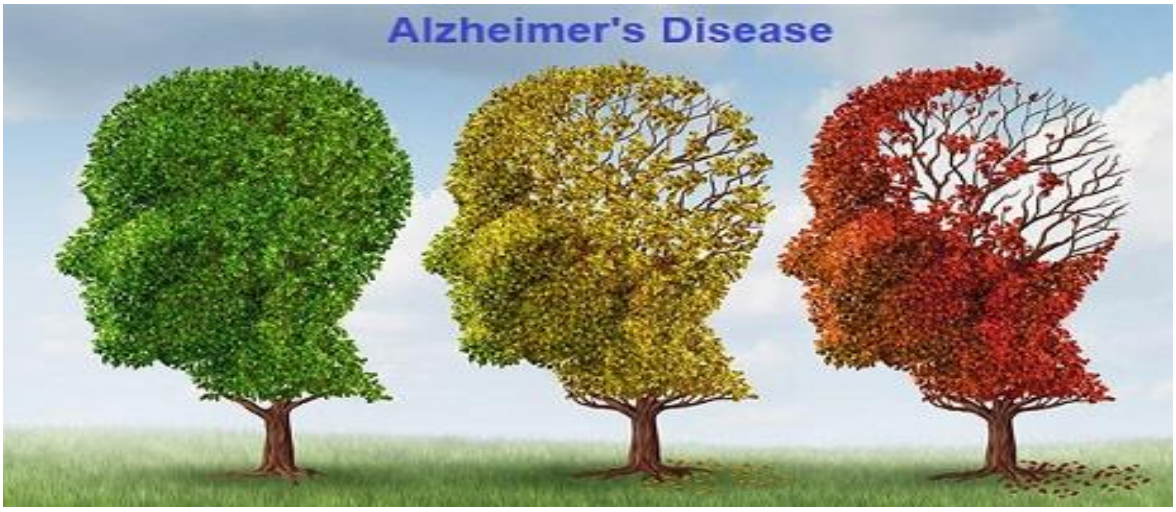


My Drift

Title: Alzheimer's Disease (AD)

Written by: Jerry D. Petersen

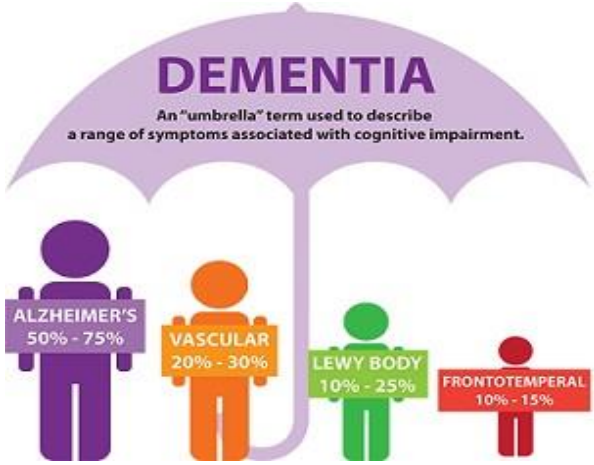
Date: 9 Oct 2017

Article Number: 270-2017-26

I better write this article about Alzheimer's disease now before I forget to do it. Memory loss is common with old people and I'm old. I sure hope I'm not that 1 person out of 9 who has Alzheimer's disease. It is a terrible disease!

IT CANNOT BE PREVENTED

Is Alzheimer's disease the same as Dementia? No



Dementia is a group of symptoms that affects mental cognitive tasks such as memory and reasoning. Dementia is an umbrella term that Alzheimer's disease falls under. It can occur due to a variety of conditions, but the most common of which is Alzheimer's disease.

As dementia progresses, it can have a huge impact on the ability to function independently. It's a major cause of disability for older adults, and places an emotional and financial burden on families and caregivers.

Symptoms of Dementia

It's easy to overlook the early symptoms of dementia, which can be mild. It often begins with simple episodes of forgetfulness. People with dementia have trouble keeping track of time and tend to lose their way in familiar settings.

As dementia progresses, forgetfulness and confusion grow. It becomes harder to recall names and faces. Personal care becomes a problem. Obvious signs of dementia include repetitious questioning, inadequate hygiene, and poor decision-making.

In the most advanced stage, people with dementia become unable to care for themselves. They will struggle remembering people and places they are familiar with. Behavior continues to change and can turn into depression and aggression.

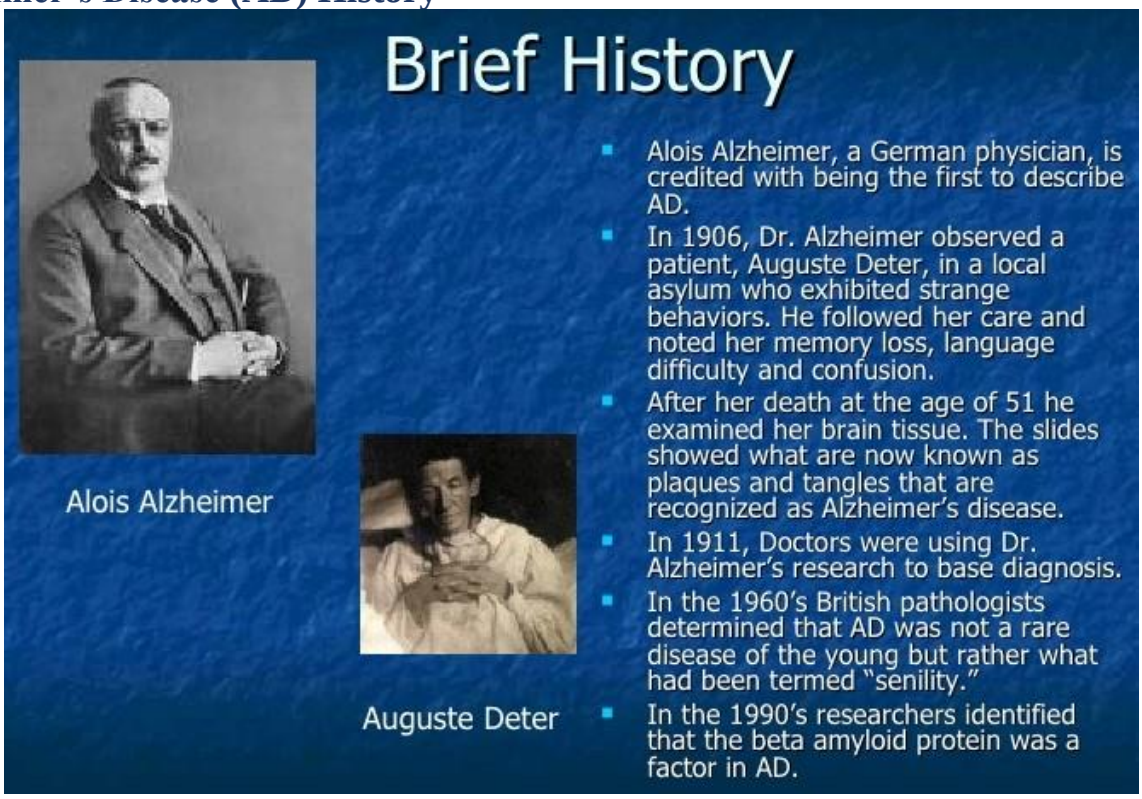
Causes of Dementia

You're more likely to develop dementia as you age. It occurs when certain brain cells are damaged. Many conditions can cause dementia, including degenerative diseases such as Alzheimer's, Parkinson's, and Huntington's. Each cause of dementia causes damage to a different set of brain cells.

Other causes of Dementia include:

- **Infections, such as HIV**
- **Stroke**
- **Depression**
- **Chronic drug use**

Alzheimer’s Disease (AD) History



Let’s face it, back in the early 1900s, people didn’t live that long. Life expectancy in the U.S. in 1906 was near 50. Current life expectancy today in 2017 is near 80. Most people didn’t live long enough to get AD.

Alzheimer’s Disease Overview

Alzheimer's is a progressive disease that destroys memory and other important mental functions. At first, someone with Alzheimer's disease may notice mild confusion and difficulty remembering. Eventually, people with the disease may even forget important people in their lives and undergo dramatic personality changes.

With Alzheimer's disease, the brain cells degenerate and die, causing a steady decline in memory and mental function. Current Alzheimer's disease medications and management strategies may temporarily improve symptoms. This can sometimes help people with Alzheimer's disease maximize function and maintain independence for a little while longer. But because there's no cure for AD, it's important to seek supportive services and tap into your support network as early as possible.

Symptoms

If you have Alzheimer's, you may be the first to notice that you're having unusual difficulty remembering things and organizing your thoughts. Or you may not recognize that anything is wrong, even when changes are noticeable to your family members, close friends or co-workers.

But over time, the disease robs you of more of your memory, especially recent memories. The rate at which symptoms worsen varies from person to person.

Sometimes people with Alzheimer's just can't think straight.

Brain changes associated with Alzheimer's disease lead to growing trouble with:

Memory

Everyone has occasional memory lapses. It's normal to lose track of where you put your keys or forget the name of an acquaintance. But the memory loss associated with Alzheimer's disease persists and worsens, affecting your ability to function at work and at home.

People with Alzheimer's may:

- **Repeat statements and questions over and over, not realizing that they've asked the question before.**
- **Forget conversations, appointments, or events, and not remember them later.**
- **Routinely misplace possessions, often putting them in illogical locations.**
- **Get lost in familiar places.**
- **Have trouble finding the right words to identify objects, express thoughts or take part in conversations.**
- **Slowly lose the ability to think and reason clearly.**
- **Have difficulty concentrating especially about abstract concepts like numbers.**
- **Find it challenging to manage finances, balance checkbooks and pay bills on time.**
- **Have trouble Multitasking – doing two or more things at the same time.**

- **Eventually forget the names of family members and everyday objects.**

Making judgments and decisions

Responding effectively to everyday problems, such as food burning on the stove or unexpected driving situations, becomes increasingly challenging.

Planning and performing familiar tasks

Once-routine activities that require sequential steps, such as planning and cooking a meal or playing a favorite game, become a struggle as the disease progresses. Eventually, people with advanced Alzheimer's may forget how to perform basic tasks such as dressing and bathing.

Changes in personality and behavior

Brain changes that occur in Alzheimer's disease can affect the way you act and how you feel. People with Alzheimer's may experience:

Depression	**Apathy**	**Social withdrawal**
Mood swings	**Distrust in others**	**Irritability**
Aggressiveness	**Changes in sleeping habits**	**Wandering**
Loss of inhibitions	**Delusions, such as believing something has been stolen**	

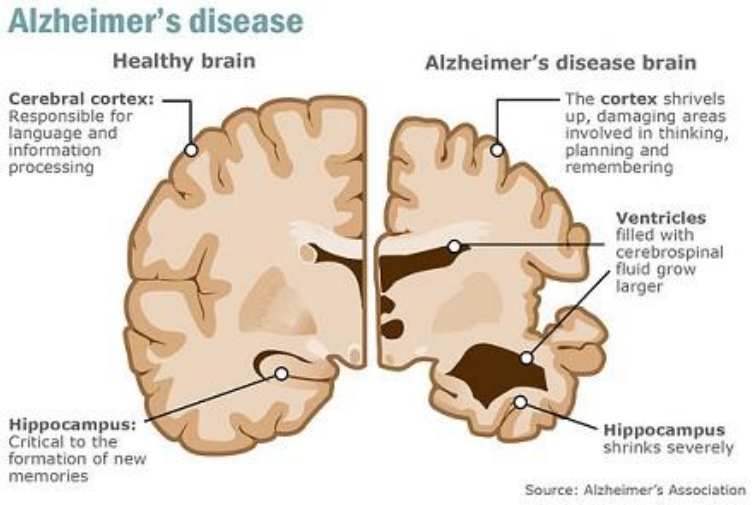
Alzheimer's Stages

Many important skills are not lost until very late in the disease. These include the ability to read, dance and sing, enjoy old music, engage in crafts and hobbies, tell stories, and reminisce. This is because information, skills and habits learned early in life are among the last abilities to be lost as the disease progresses. The part of the brain that stores this information tends to be affected later in the course of the disease. Capitalizing on these abilities can foster successes and maintain quality of life even into the moderate phase of the disease.

TABLE: COMMON SYMPTOMS OF ALZHEIMER'S, BY STAGE		
Mild Alzheimer's (Early)	**Moderate Alzheimer's (Middle)**	**Severe Alzheimer's (Late)**
Problems retrieving words or names	Cannot recall details from personal history	Unaware of surroundings
Trouble retaining new information	Disoriented in terms of place and time	Major personality changes
Forgetting where objects have been placed	Difficulty choosing proper clothing for the season	Full-time care is required
Changes in mood	May wander or become lost	Loss of ability to walk, sit, and eventually swallow
Mathematical challenges	May experience behavioral and personality changes	Increasing difficulty communicating
Withdrawal from social situations		Vulnerable to infections

AD Causes

Like all types of dementia, Alzheimer's disease is caused by brain cell death. It is a neurodegenerative disease, which means there is progressive brain cell death that happens over a course of time. The total brain size shrinks with Alzheimer's - the tissue has progressively fewer nerve cells and connections.



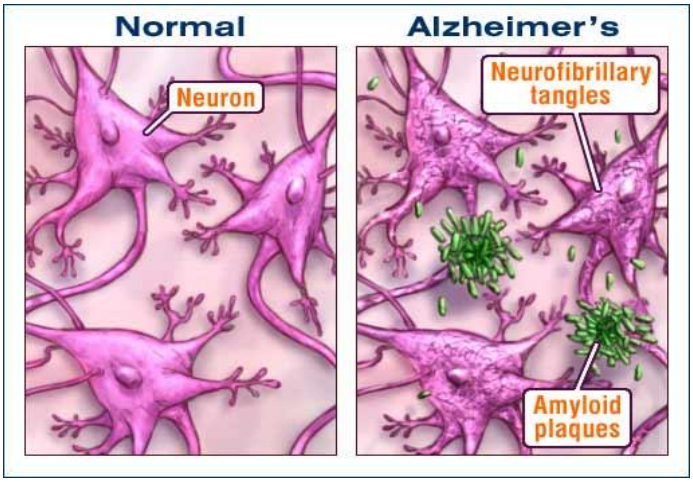
Progressive brain cell death causes the overall size of the brain to shrink

Alzheimer's disease results in fewer nerve cells and connections

Scientists believe that for most people, Alzheimer's disease is caused by a combination of genetic, lifestyle and environmental factors that affect the brain over time.

Although the causes of Alzheimer's aren't yet fully understood, its effect on the brain is clear. Alzheimer's disease damages and kills brain cells. A brain affected by Alzheimer's disease has many fewer cells and many fewer connections among surviving cells than does a healthy brain. As more and more brain cells die, Alzheimer's leads to significant brain shrinkage. When doctors examine Alzheimer's brain tissue under the microscope, they see two types of abnormalities that are considered hallmarks of the disease:

Plaques. **These clumps of a protein called beta-amyloid may damage and destroy brain cells in several ways, including interfering with cell-to-cell communication. Although the ultimate cause of brain-cell death in Alzheimer's isn't known, the collection of beta-amyloid on the outside of brain cells is a prime suspect.**



Tangles. **Brain cells depend on an internal support and transport system to carry nutrients and other essential materials throughout their long extensions. This system requires the normal structure and functioning of a protein called tau. In Alzheimer's, threads of tau protein twist into abnormal tangles inside brain cells, leading to failure of the transport system. This failure is also strongly implicated in the decline and death of brain cells.**

Risk factors

Age

Increasing age is the greatest known risk factor for Alzheimer's. Alzheimer's is not a part of normal aging, but your risk increases greatly after you reach age 65. The rate of dementia doubles every decade after age 60. In fact, nearly half of all people over the age of 85 have Alzheimer's disease. AD kills around 100,000 Americans a year as it insidiously robs them of their memory and wreaks havoc on their lives and the lives of their loved ones.

People with rare genetic changes linked to Early-onset Alzheimer's begin experiencing symptoms as early as their 30s. Early-onset Alzheimer's is an uncommon form of dementia that strikes people younger than age 65. Of all the people who have Alzheimer's disease, about 5 percent develop symptoms before age 65. So, if 5 million Americans have Alzheimer's, at least 250,000 people have the early-onset form of the disease.

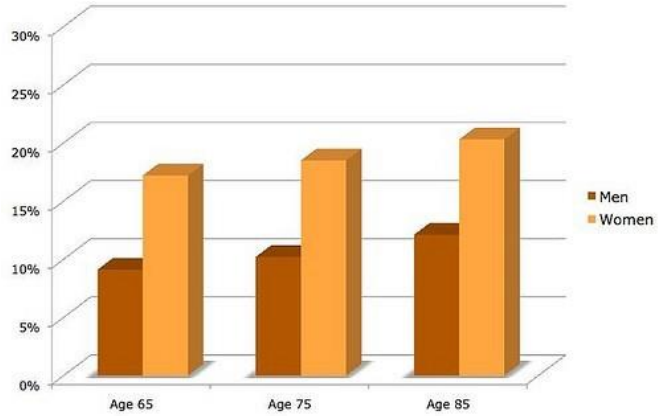
Family history and genetics

Your risk of developing Alzheimer's appears to be somewhat higher if one or both parents, a brother or a sister has the disease. Scientists have identified rare changes (mutations) in three genes that virtually guarantee a person who inherits them will develop Alzheimer's. But these mutations account for less than 5 percent of Alzheimer's disease.

Most genetic mechanisms of Alzheimer's among families remain largely unexplained. The strongest risk gene researchers have found so far is apolipoprotein e4 (APoE4), though not everyone with this gene goes on to develop Alzheimer's disease. Other risk genes have been identified but not conclusively confirmed.

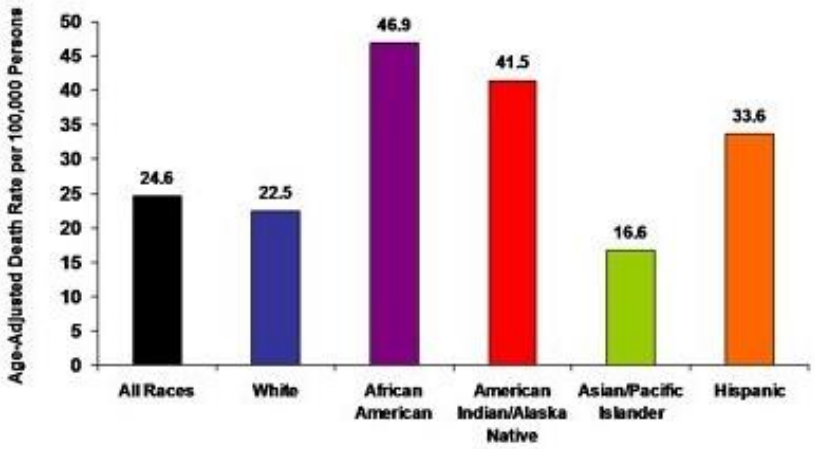
Sex

(No – Having sex does not cause Alzheimer's disease!)



Women are more likely than are men to develop Alzheimer's disease, in part because they live longer.

Race



For some unknown reason, Blacks, Indians, and Hispanics have a greater chance of getting Alzheimer's disease. Asians and Whites have the lowest rates.

Down syndrome

Many people with Down syndrome develop Alzheimer's disease. Signs and symptoms of Alzheimer's tend to appear 10 to 20 years earlier in people with Down syndrome than they do for the general population. A gene contained in the extra chromosome that causes Down syndrome significantly increases the risk of Alzheimer's disease.

Mild cognitive impairment

People with mild cognitive impairment (MCI) have memory problems or other symptoms of cognitive decline that are worse than might be expected for their age, but not severe enough to be diagnosed as dementia. Those with MCI have an increased risk — but not a certainty — of later developing dementia. Taking action to develop a healthy lifestyle and strategies to compensate for memory loss at this stage may help delay or prevent the progression to dementia.

Past head trauma

People who've had a severe head trauma seem to have a greater risk of Alzheimer's disease.

Lifestyle and heart health

There's no lifestyle factor that's been definitively shown to reduce your risk of Alzheimer's disease.

However, some evidence suggests that the same factors that put you at risk of heart disease also may increase the chance that you'll develop Alzheimer's. Examples include:

- **Lack of exercise**
- **Obesity**
- **Smoking or exposure to secondhand smoke**
- **High blood pressure**
- **High blood cholesterol**
- **Poorly controlled type 2 diabetes**
- **A diet lacking in fruits and vegetables**

These risk factors are also linked to vascular dementia, a type of dementia caused by damaged blood vessels in the brain. Working with your health care team on a plan to control these factors will help protect your heart — and may also help reduce your risk of Alzheimer's disease and vascular dementia.

What else can I do to help my brain stay healthy?

Lifelong learning and social engagement (Staying Mentally Active) can help the brain

Several recent studies have found an association between lifelong involvement in mentally and socially stimulating activities having a reduced risk of Alzheimer's disease.

Ways of keeping your brain healthy longer

Mental decline as you age appears to be largely due to altered connections among brain cells. But research has found that keeping the brain active seems to increase its vitality and may build its reserves of brain cells and connections. You could even generate new brain cells.

Low levels of education have been found to be related to a higher risk of Alzheimer's later in life. This may be due to a lower level of life-long mental stimulation. Put another way, higher levels of education appear to be somewhat protective against Alzheimer's, possibly because brain cells and their connections are stronger. Well-educated individuals can still get Alzheimer's, but symptoms may appear later because of this protective effect.

Beer boosts brain health

Various studies have shown that a mug or two of beer daily may help prevent Alzheimer's and other brain related diseases. One study tracked the health condition of nearly 10,000 women, revealed that those who consumed one beer a day reduced the risk of showing weak mental ability by nearly 20 percent, in comparison to those who did not drink at all. It was also found that these older women, scored much better on an average, on tests of mental skills, almost behaving 18 months 'younger' as compared to the non-drinkers.

A new study, which was published in the American Chemical Society's Journal of Agricultural and Food Chemistry in 2016, found that an ingredient in beer hops called xanthohumol (Xn) protects the brain from cell damage. Researchers think this compound might not only help to fight free radical damage in the brain but it might also potentially slow the development of disorders such as Alzheimer's and Parkinson's diseases.

You all remember the comedy sitcom Cheers, right? Well, one night at the bar, Cliff Clavin explains to Norm Peterson the benefits of beer. I don't think I've ever heard the concept explained any better than this:

THE BUFFALO THEORY

'Well you see, Norm, it's like this . . A herd of buffalo can only move as fast as the slowest buffalo. And when the heard is hunted, it is the slowest and weakest ones at the back that are killed first. This natural selection is good for the herd as a whole, because the general speed and health of the whole group keeps improving by the regular killing of the weakest members. In much the same way, the human brain can only operate as fast as the slowest brain cells. Now, as we know, excessive intake of alcohol kills brain cells. But naturally, it attacks the slowest and weakest brain cells first. In this way, regular consumption of beer eliminates the weaker brain cells, making the brain a faster and more efficient machine. And that, Norm, is why you always feel smarter after a few beers.'

Brain food

What does the food you eat have to do with how your brain functions? Turns out an awful lot. While we've always known that what we eat affects our bodies and how we look, scientists are also learning more and more that what we eat takes a toll on our brains. Yes, brain foods matter.

Here is a list of 10 foods that are good for our brains:

Brain Food	Why This Food Helps the Brain
1. Beets and Sweet Potatoes	Reduce inflammation and rids blood of toxins
2. Blueberries	Antioxidant-rich plus vitamins C and K and fiber
3. Broccoli	High levels of vitamins C and K and choline
4. Coconut Oil	Natural anti-inflammatory and kills bad bacteria
5. Dark Chocolate	It's antioxidant and anti-inflammatory properties helps lower blood pressure and improve blood flow to both the brain and heart
6. Spinach and Kale	Loaded with vitamins A and K
7. Salmon	Packed with omega-3 fatty acids to help our brain running smoothly and improve memory
8. Walnuts	Contain high levels of antioxidants, vitamins and minerals that help improve mental alertness
9. Avocados	Contains both vitamin K and folate to help prevent blood clots in the brain
10. Coffee	Two main components in coffee — caffeine and antioxidants — help your brain

Kale

Blueberries

Walnuts

Dark Chocolate

How does Alzheimer's disease kill you?

Alzheimer disease is the sixth most common cause of death in the United States. It causes a progressive degeneration of the gray matter of the brain, which controls thinking, memory, movement, and sensation. The white matter of the brain -- the part responsible for communicating among regions of the brain -- is also damaged by Alzheimer's disease. Related brain changes affect memory centers first but advance to other functional regions of the brain. While people with Alzheimer's may die of other unrelated conditions, such as a heart attack, death typically results from complications related to loss of critical brain functions.

Complications

Memory and language loss, impaired judgment, and other cognitive changes caused by Alzheimer's can complicate treatment for other health conditions. A person with Alzheimer's disease may not be able to:

- **Communicate that he or she is experiencing pain — for example, from a dental problem**
- **Report symptoms of another illness**
- **Follow a prescribed treatment plan**
- **Notice or describe medication side effects**

As Alzheimer's disease progresses to its last stages, brain changes begin to affect physical functions, such as swallowing, balance, and bowel and bladder control. These effects can increase vulnerability to additional health problems such as:

- **Inhaling food or liquid into the lungs (aspiration)**
- **Pneumonia and other infections (more about this below)**
- **Falls and fractures**
- **Bedsores**
- **Malnutrition or dehydration**

Pneumonia and Other Infections

Pneumonia is leading cause of death in people with advanced Alzheimer's disease. As the disease progresses, the abilities to walk, sit upright and swallow normally decrease. Lack of mobility diminishes the capacity of the lungs to expand and manage normal secretions properly, increasing susceptibility to pneumonia. Additionally, poorly coordinated swallowing can allow food, liquid and saliva to enter the airways, causing a particularly aggressive form of pneumonia. Pneumonia may be the final complication, but Alzheimer's disease is the cause of death in these situations.

Some more AD statistics

Some common AD questions

How is it diagnosed?

People suspected of having early symptoms of dementia are usually given a blood test and physical examination to rule out or identify any other medical problems. A memory test is carried out, initially focused on recent events and past memories. A psychologist may then carry out a more detailed assessment of the person's memory and cognitive skills. A brain scan may be carried out to identify changes in the structure of the brain.

Is Alzheimer's disease fatal?

There is a myth that says, "Alzheimer's disease is not fatal". In reality, Alzheimer's disease has no survivors! We have figured that out by now, right?

How long can you live with Alzheimer's disease?

Life expectancy varies for each person with Alzheimer's. The average life expectancy after diagnosis is eight to 10 years. In some cases, however, it can be as short as three years or as long as 20 years.

How is it treated?

There is currently no cure for Alzheimer's disease. Some drug treatments can alleviate the symptoms and may slow down the disease's progression. But, that's it.

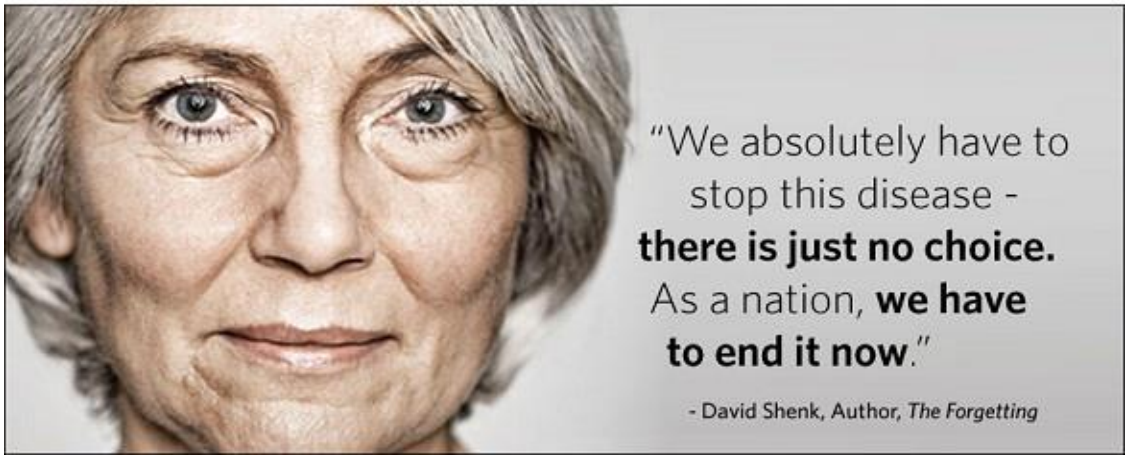
What states have the highest and lowest Alzheimer's death rate in U.S.?

(The U.S. national rate is 25.1 deaths per 100,000)
Highest is Washington State with 43.6 – Next highest is North Dakota with 37.2
Lowest is Hawaii with 10.3 – New York is next with 11.3

Conclusion

I think I have figured out how to NOT get Alzheimer's disease. You need to:

- **Be Asian or White**
- **Be a Male**
- **Be a positive thinker**
- **Drink coffee**
- **Read and write often**
- **Have no bad genes**
- **Talk and be sociable**
- **Drink beer**
- **Exercise regularly**
- **Eat healthy**
- **Live in Hawaii**
- **Die young**



Bigdrifter44@gmail.com

Bigdrifter.com