



ALZHEIMER'S

**A GUIDE TO CARING FOR ADULT AND
ELDERS WITH ALZHEIMER'S DISEASE**

HPRB 5410W: Technical Manual



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Chapter 1:

Introduction to Alzheimer's Disease



Using the manual

This manual is designed to help educate those diagnosed with Alzheimer's disease, their family members, and caretakers. Alzheimer's is a common disease for elderly individuals around the world. It is important that those with the disease are educated, along with those who are related to them.



This manual is broken down into 8 chapters. It begins by informing individuals about what Alzheimer's is and progressively provides information on how to treat and care for them. The manual also aims to inform family members on how to live with and help an individual who has been diagnosed. By the end of this manual the reader should have a better feel for the disease and how life may be adjusted moving forward.



What is Alzheimers Disease? ^{1, 2}

Alzheimer's Disease is the most common cause of dementia. It is a neurodegenerative disorder that inhibits memory, cognitive abilities, and causes behavior change. Alzheimer's currently accounts for 60-80% of dementia cases. The biggest risk factor is age. Majority of those with Alzheimer's are 65 and older.

Alzheimer's is a progressive disease that worsens over time. Individuals may eventually lose the ability to carry on a conversation and respond to external stimuli.



Risk Factors

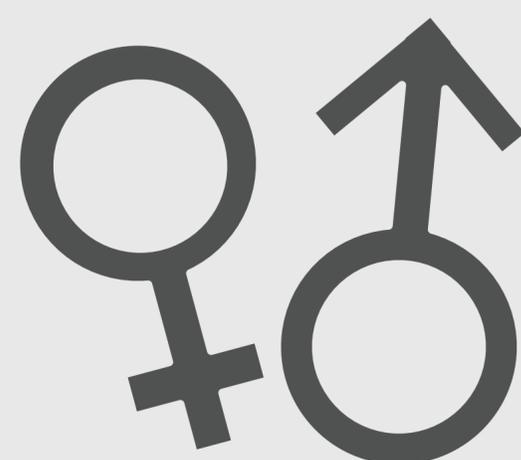
Age

Age is the greatest risk factor. Above the age of 65, the risk of developing Alzheimer's doubles every 5 years.³



Sex

Women are twice as likely to develop Alzheimer's as men³



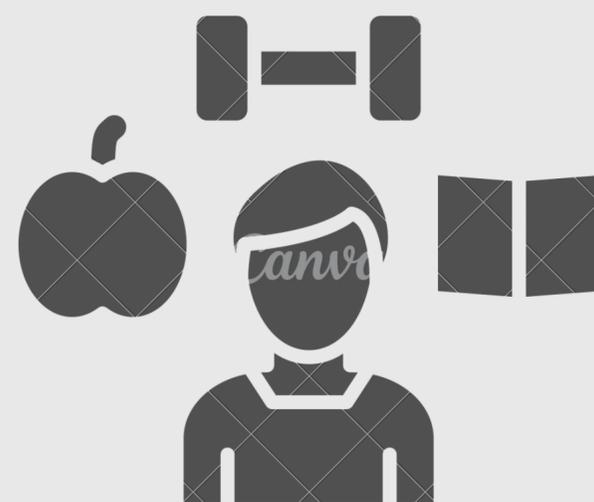
Genetics

There are specific genes that may be passed down from family members³



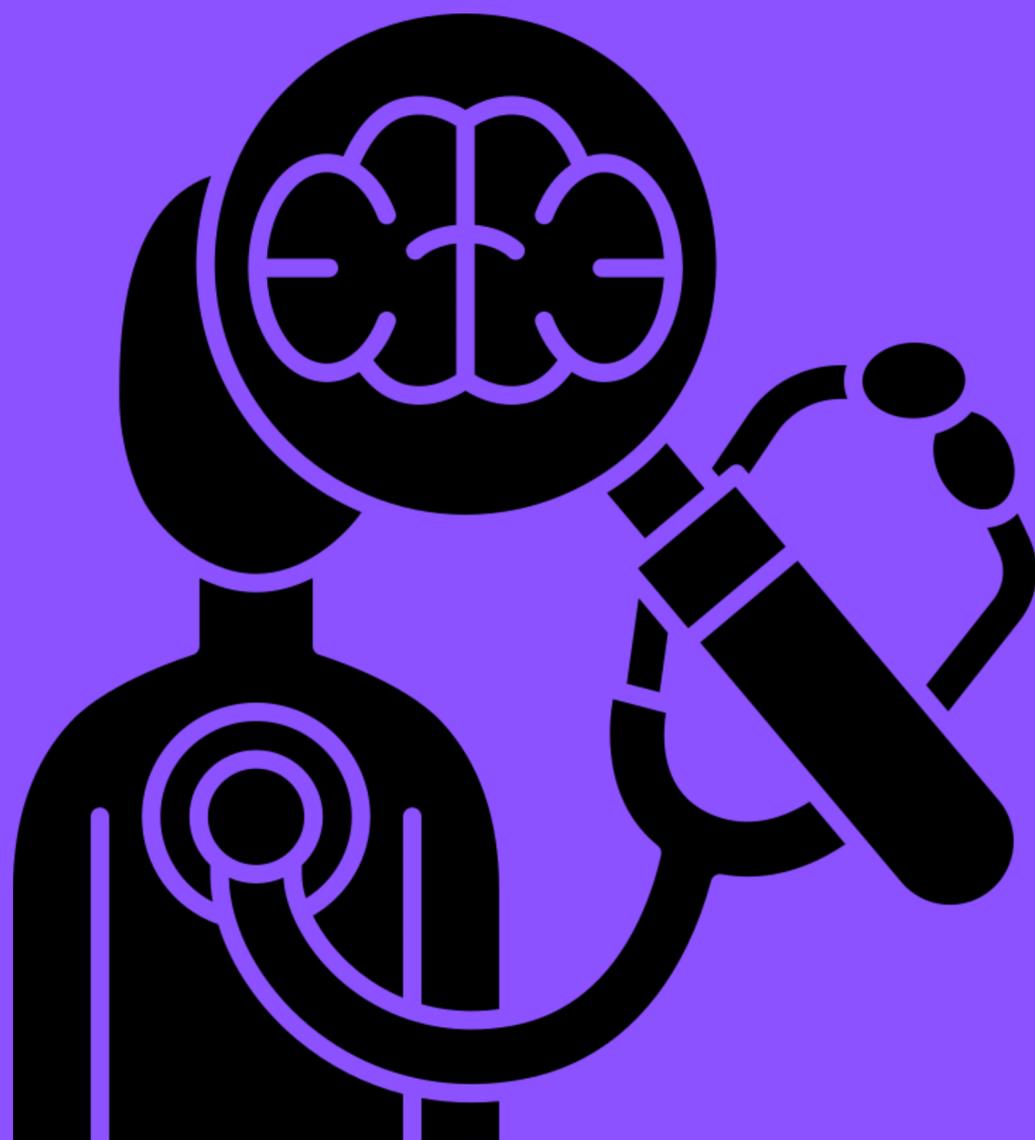
Lifestyle

Healthy eating habits, exercise, no smoking, no alcohol, etc. can help decrease your chances of developing Alzheimer's³





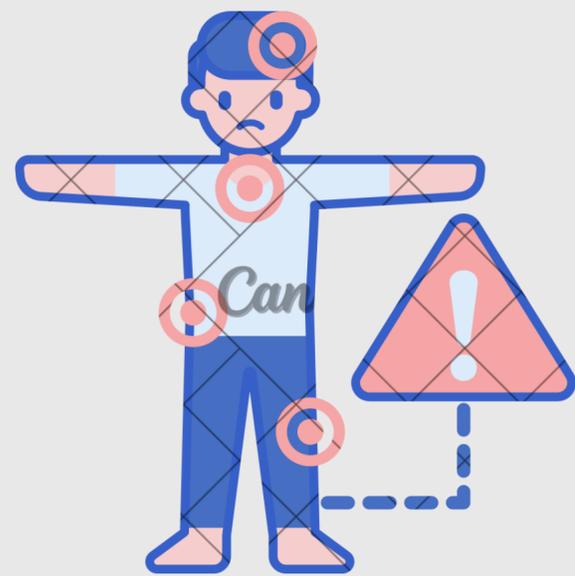
Chapter 2: Diagnosing



Symptoms of Alzheimer's Disease:

Common Symptoms⁴

- Difficulty performing daily tasks
- memory loss
- problems using language
- Disorientation to time and place
- displacing objects
- loss of judgement
- personality changes
- excessive sleep



Changes in behavior⁴

- feeling anxious and sad
- personality changes
- inappropriate behavior
- withdrawal from work and social settings
- feeling less interested in others feelings



How is Alzheimer's Diagnosed:⁵

There is not one singular test that can diagnose Alzheimer's Disease. Doctors will use a combination of medical tests along with the patients family and medical history. Some tests that can be performed to diagnose Alzheimer's are: neurological exams, cognitive and functional assessments, cerebrospinal fluid, blood tests, and imaging such as MRI, CT, and PET scans.



Physical Examination:⁵

Upon examination the doctor will most likely ask the following:

- Ask about diet and nutritional habits
- Review current medications
- Check vital signs
- Review overall health and movement
- Collect blood and urine samples

Finding a healthcare provider ⁵

Finding good care is imperative for the health and wellness of the patient. Start by assessing the care needs of the patient to evaluate the level of care necessary. Begin by contacting local providers. Some good places to start are contacting your local Alzheimer's center, primary care providers, local senior centers, and reach out to others who have had experience with Alzheimer's and who they have received care from. Asking your current doctor for a referral is always a smart option.



Types of Alzheimer's Care ⁶

- Day-to-day support
- Long-term in home care
- Residential facility care
- Hospice services

Chapter 1 and 2 Sources

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Chapter 3: Genetic Risks

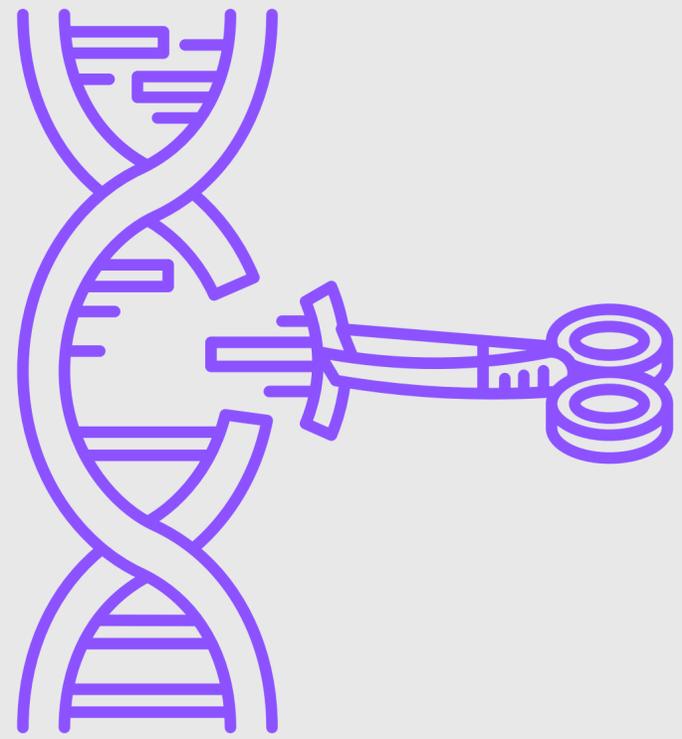


Genes and Alzheimer's Disease

Research shows that genes can increase risk of developing Alzheimer's disease. There is no singular genetic cause, but rather multiple genes combined with lifestyle factors that increase one's risk.¹

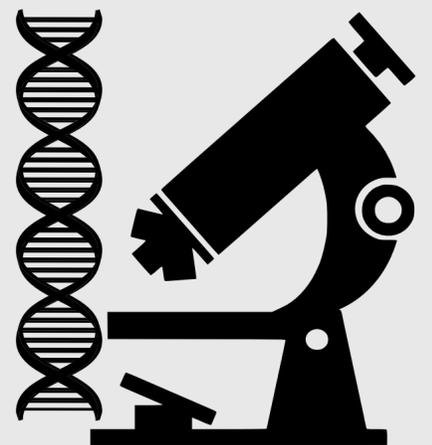
Genetic Variants

The apolipoprotein E (APOE) gene is thought to be the main genetic cause of the development of Alzheimer's. This gene comes in several forms, with some having a higher risk factor than others.¹



3 Genetic Variants Known to Cause Alzheimer's Disease:¹

1. Amyloid precursor protein (APP)
2. Presenilin 1 (PSEN1)
3. Presenilin 2 (PSEN2)



Why Test For Alzheimer's?

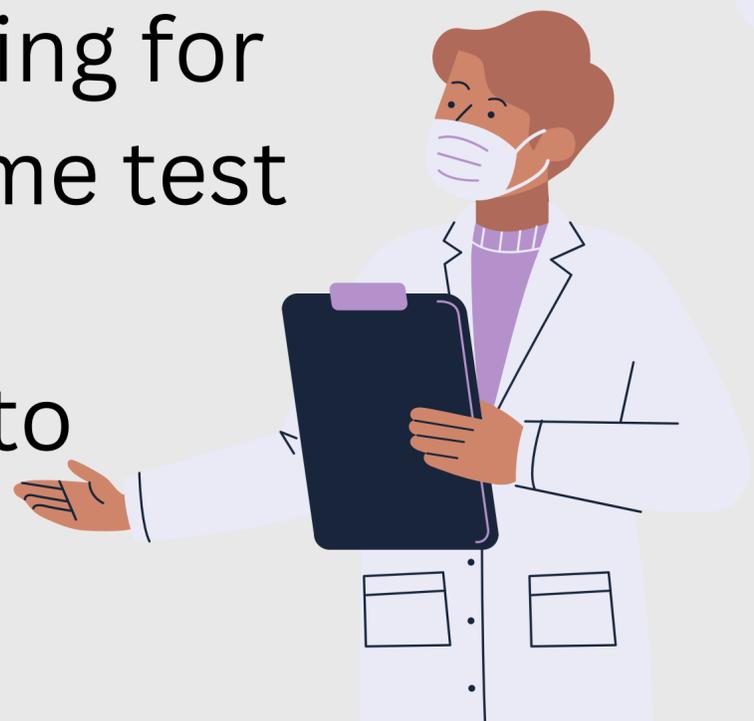
If a parent carries any 1 of these 3 genes, there is a 50% chance their child will also inherit the gene. Inheritance of any one of the genes significantly increases one's risk of developing Alzheimer's before the age of 65. This genetic information can be beneficial for intervention plans, and is obtained through genetic testing.²

Testing for Alzheimer's

Genes



Genetic tests are not commonly administered, but rather when a patient is showing early signs of Alzheimer's. Healthcare professionals can order a genetic test screening for APP, PSEN1, and PSEN2. At-home test kits are also available, but it is recommended to see a doctor to discuss results.¹





Chapter 4:

Effects on Body & Mind



Alzheimer's Effect on Brain

Alzheimer's disease slowly degrades and damages the brain, specifically the parts essential for memory forming.

Neuron stop functioning and begin losing connections with other neurons. Other parts of the brain begin to shrink, causing memory problems and cognitive impairment. ¹

Stages of Alzheimer's

Mild

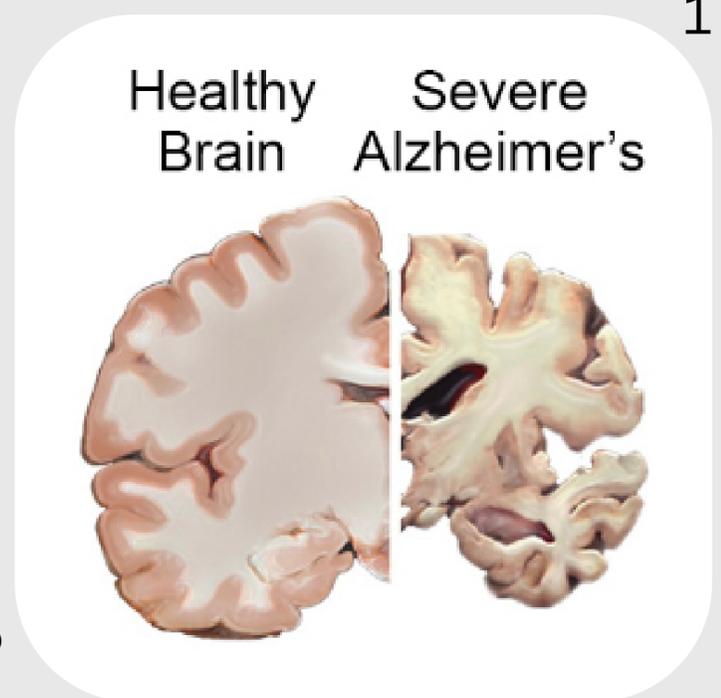
- memory loss and cognitive difficulties

Moderate

- damage to areas of brain that control speech, reasoning, and sensory smells

Severe

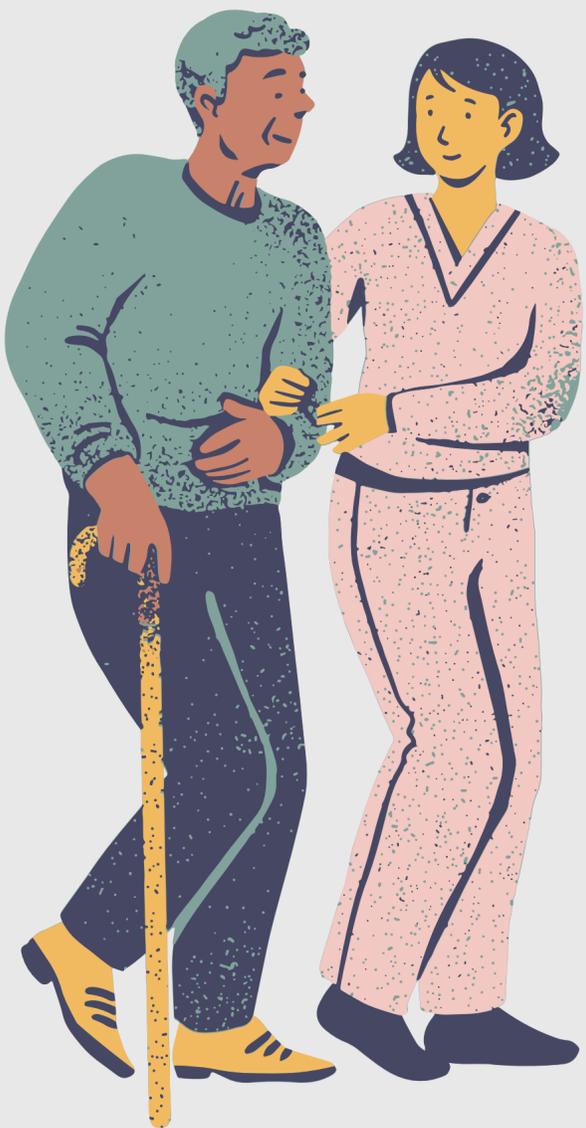
- plaque and neuron tangles spread throughout the brain
- brain tissue significantly decreases
- complete loss of communication, completely dependent on others ¹



Alzheimer's Effect on the Body

As the disease continues to develop, it begins to harm other parts of the body. Patients begin having difficulty controlling their body and may experience the following:

- difficulty standing or walking due to loss of balance control
- poor coordination and dexterity
- fatigue / insomnia
- weak or stiff muscles
- difficulty eating, chewing, and swallowing²



Chapter 3 Sources

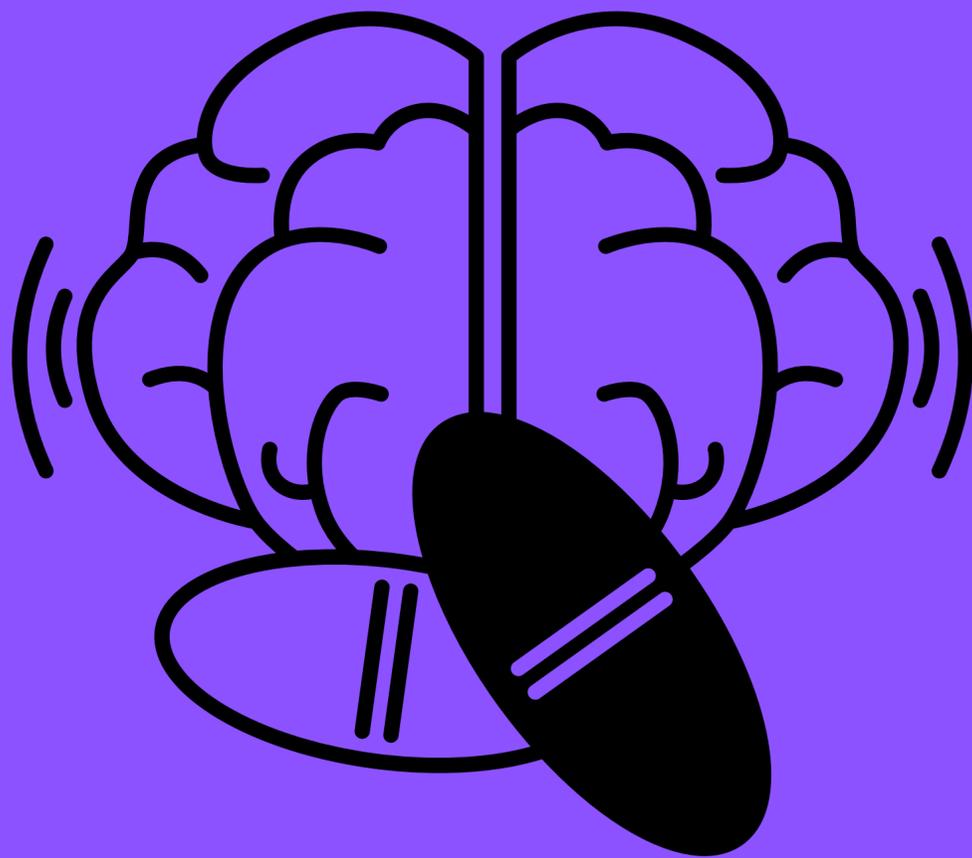
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2. Association As. Is Alzheimer's Genetic? Alzheimer's Association.

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2. Care CCALaM. How Does Alzheimer's Affect the Body? And How Does Memory Care Help? Cedar Cove.



Chapter 5: Treatment



How Is Alzheimer's Disease Treated?

There are currently no known interventions that will cure Alzheimer's, but several prescription drugs are approved by the U.S. Food and Drug Administration (FDA) to help either manage the symptoms or to treat the disease. Most FDA-approved drugs work best for people in the early or middle stages of Alzheimer's.¹



When thinking about any treatment, it is important to have a conversation with a health care professional to determine whether it is appropriate. A doctor who is experienced in using these medications should monitor people who are taking them and provide information that can help make informed decisions about their usage and care.²

Navigating Treatment Options²

The U.S. Food and Drug Administration (FDA) has approved medications for Alzheimer's. These fall into two categories:

- Drugs that temporarily ease some symptoms of Alzheimer's disease
- Drugs that change disease progression in people living with Alzheimer's

Drugs that treat symptoms

As Alzheimer's progresses, brain cells die and connections among cells are lost. This causes cognitive (memory and thinking) and noncognitive (behavioral and psychological) symptoms to worsen. While these medications do not stop the damage Alzheimer's causes to brain cells, they may help lessen or stabilize symptoms for a limited time.

Drugs that change disease progression

Drugs in this category slow disease progression. They slow the decline of memory and thinking, as well as function, in people living with Alzheimer's disease.

Drugs That Treat Symptoms²

The following medications are prescribed to treat symptoms related to memory and thinking:

Cholinesterase inhibitors are prescribed to treat symptoms related to memory, thinking, language, judgment and other thought processes. These medications prevent the breakdown of acetylcholine, a chemical messenger important for memory and learning.

The cholinesterase inhibitors most commonly prescribed are:

- Donepezil (Aricept[®]): approved to treat all stages of Alzheimer's disease
- Rivastigmine (Exelon[®]): approved for mild-to-moderate Alzheimer's
- Galantamine (Razadyne[®]): approved for mild-to-moderate stages of Alzheimer's disease

Glutamate regulators are prescribed to improve memory, attention, reason, language and the ability to perform simple tasks. This type of drug works by regulating the activity of glutamate, a different chemical messenger that helps the brain process information. This drug is known as:

- Memantine (Namenda[®]): approved for moderate-to-severe Alzheimer's disease

Cholinesterase inhibitor + glutamate regulator is a combination of a cholinesterase inhibitor and a glutamate regulator.

- Donepezil and memantine (Namzaric[®]): approved for moderate-to-severe Alzheimer's disease

Drugs That Change Disease Progression²

Drugs in this category aim to slow the decline of memory and thinking, as well as function, in people living with Alzheimer's disease.

Amyloid-targeting approaches

Anti-amyloid treatments work by attaching to and removing beta-amyloid, a protein that accumulates into plaques from the brain. They can change the course of the disease for people in the early stages, giving them more time to participate in daily life and live independently. Clinical trial participants who received anti-amyloid treatments experienced reduction in cognitive decline observed through measures of cognition (memory and orientation) and function (conducting personal finances and performing household chores).

- **Aducanumab (Aduhelm[®])** is an anti-amyloid antibody intravenous (IV) infusion therapy that is delivered every month. It has received accelerated approval from the FDA to treat early Alzheimer's disease.
- **Lecanemab (Leqembi)** is an anti-amyloid antibody intravenous (IV) infusion therapy that is delivered every two weeks. It has received traditional approval from the FDA to treat early Alzheimer's disease.

Dosage and Side Effects of Alzheimer's Disease Medications¹

Doctors usually start patients at low drug doses and gradually increase the dosage based on how well a patient tolerates it. There is some evidence that certain people may benefit from higher doses of Alzheimer's medications. However, the higher the dose, the more likely unwanted side effects will occur.

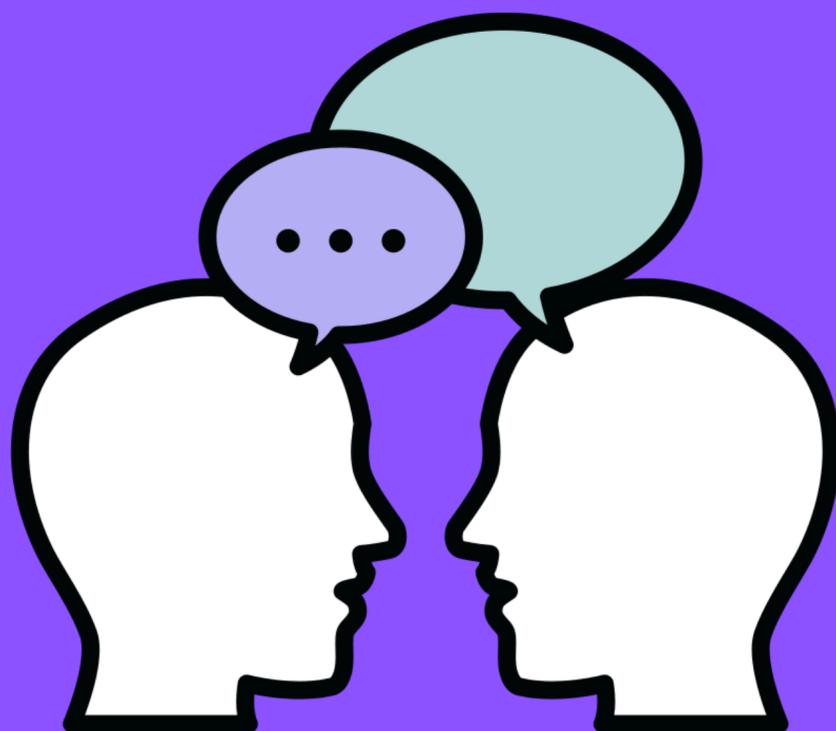
Patients should be monitored when a drug is started. All of these medicines have possible side effects that may include nausea, vomiting, diarrhea, allergic reactions, loss of appetite, headaches, confusion, dizziness, and falls. Report any unusual symptoms to the prescribing doctor right away.

It is important to follow your doctor's instructions when taking any medication, including vitamins and herbal supplements. Talk with your doctor before adding or changing any medications.





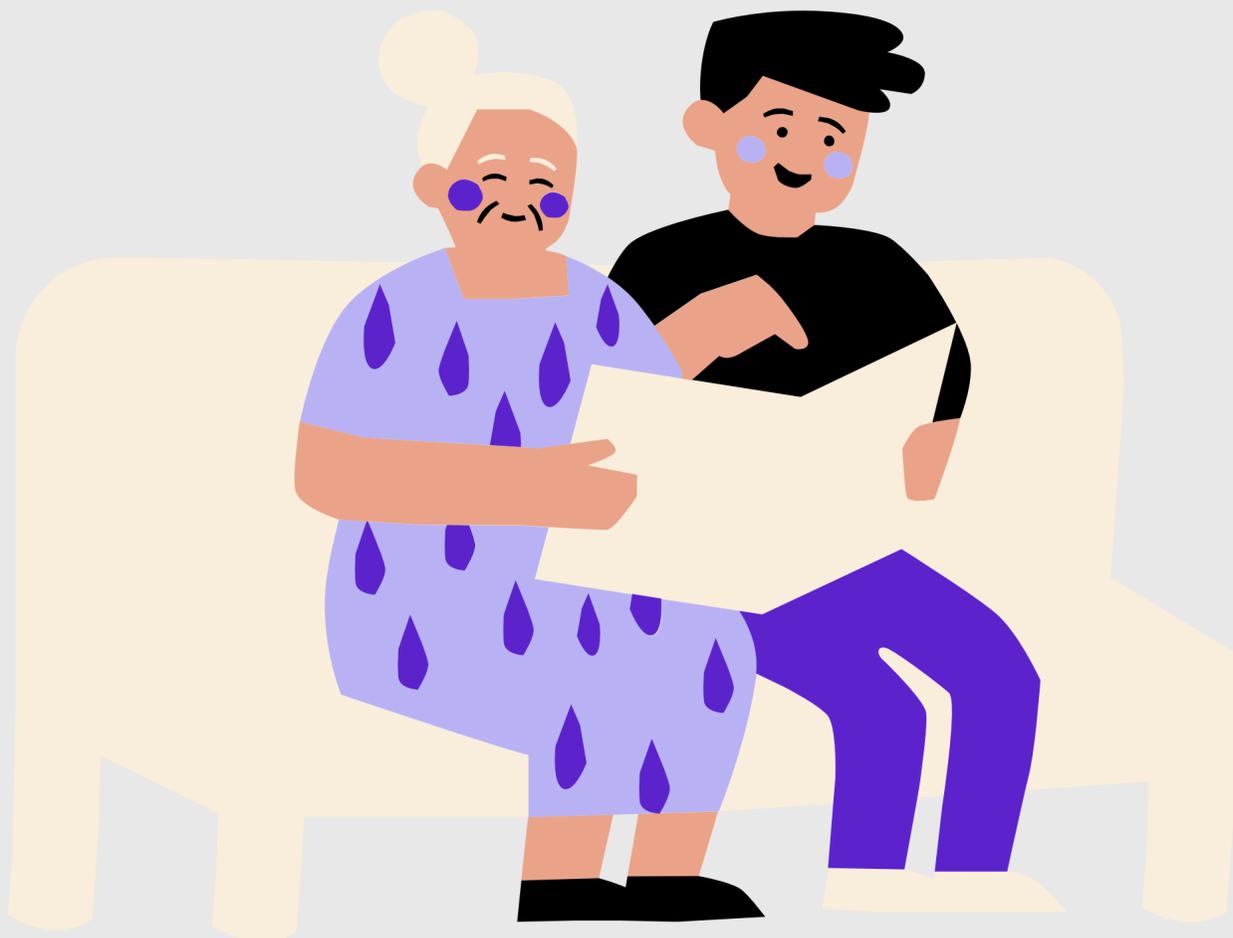
Chapter 6: Communication with an Alzheimer Patient



Communication and Alzheimer's¹

Alzheimer's disease gradually diminishes a person's ability to communicate.

Communication is hard for people with Alzheimer's because they have trouble remembering things. They may struggle to find words or forget what they want to say. You may feel impatient and wish they could just say what they want, but they can't. Communication with a person with Alzheimer's requires patience, understanding, and good listening skills. The strategies in this chapter can help both you and the person with Alzheimer's understand each other better.



Help Make Communication Easier²

Try some tips that may make communication easier:

- Make eye contact and call the person by name.
- Be aware of your tone, how loud your voice is, how you look at the person, and your body language.
- Encourage a two-way conversation for as long as possible.
- Use other methods besides speaking, such as gentle touching.
- Try distracting the person if communication creates problems.

To encourage the person to communicate with you:

- Show a warm, loving, matter-of-fact manner.
- Hold the person's hand while you talk.
- Be open to the person's concerns, even if he or she is hard to understand.
- Let him or her make some decisions and stay involved.
- Be patient with angry outbursts.

To speak effectively with a person who has Alzheimer's:

- Offer simple, step-by-step instructions.
- Repeat instructions and allow more time for a response. Try not to interrupt.
- Don't talk about the person as if he or she isn't there.
- Don't talk to the person using "baby talk" or a "baby voice."

Things to Say to be Direct, Specific, and Positive²

Here are some examples of what you can say:

- “Let’s try this way,” instead of pointing out mistakes.
- “Please do this,” instead of “Don’t do this.”
- “Thanks for helping,” even if the results aren’t perfect.

You also can:

- Ask questions that require a yes or no answer. For example, you could say, “Are you tired?” instead of “How do you feel?”
- Limit the number of choices. For example, you could say, “Would you like a hamburger or chicken for dinner?” instead of “What would you like for dinner?”
- Use different words if he or she doesn't understand the first time. For example, if you ask the person whether he or she is hungry and you don’t get a response, you could say, “Dinner is ready now. Let’s eat.”
- Try not to say, “Don’t you remember?” or “I told you.”

Chapter 5 Sources

1. How is Alzheimer's disease treated? National Institute on Aging.

<https://www.nia.nih.gov/health/alzheimers-treatment/how-alzheimers-disease-treated>.

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Chapter 6 Sources

1. Alzheimer's Association. Communication and Alzheimer's. Alzheimer's Disease and Dementia.

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2. Alzheimer's Caregiving: Changes in Communication Skills. National Institute on Aging.

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Chapter 7: Families of Alzheimer's Patients



Navigating the New Normal¹

Having a family member receive an Alzheimer's diagnosis can be extremely difficult and overwhelming. As you adjust, it is important to:

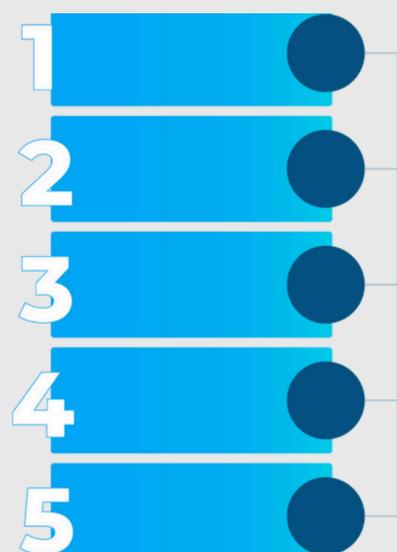
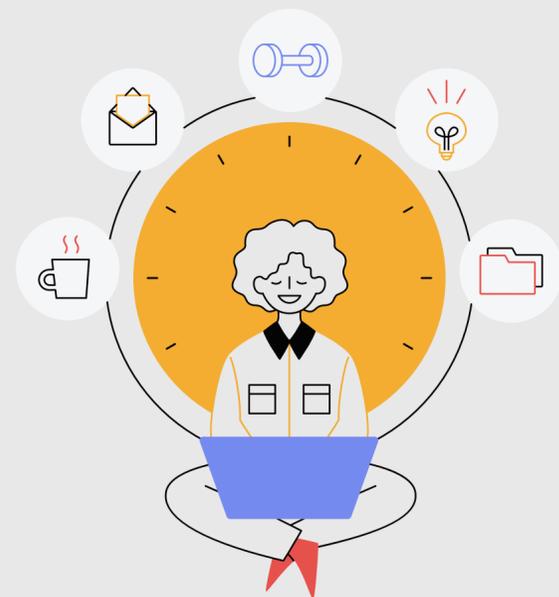
- **Educate yourself about Alzheimer's disease**
- **Ask for support:** You will likely become a part of your family member's caretaking team. Taking care of your own mental and physical health will allow you to best support them. Consider joining a support group for families of Alzheimer's patients
- **Don't be discouraged:** Feeling hopeless and defeated is often normal when a loved one has an Alzheimer's diagnosis. However, there will still be good days among the bad, as everyone experiences the disease differently.



Caregiving Tips ²

As part of your family member's care team, some important things to consider are:

- **Try to maintain a routine:** this can help them maintain some sense of control as they know what to expect each day



- **Explain things step by step:** When helping with actions such as dressing or bathing, explaining exactly what you are doing can help to reduce worry and confusion

- **Have honest conversations:** Speak with your family member about what kind of help they need. Allowing them to maintain some sense of independence can be important or their own coping.



Home Safety Tips³

- Make sure there is good lighting in each room
- Make sure stairs have handrails
- Place safety plugs into unused electrical sockets
- Make sure dangerous substances such as cleaning products are locked up/out of reach
- Keep rooms/hallways clear of tripping hazards
- Avoid busy/confusing patterns for decorations



Chapter 7 Sources

1. Alzheimer's Association. (2023). Accepting the Diagnosis. Alzheimer's Disease and Dementia. https://www.alz.org/help-support/caregiving/stages-behaviors/accepting_the_diagnosis#:~:text=Allowing%20time%20to%20process%20the,in%20exactly%20the%20same%20way.
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Chapter 8: Concluding Thoughts



Chapter Summaries

Introduction

This chapter explains how to best use this manual, as well as overviewing what Alzheimer's disease is and going over risk factors

Diagnosing

This chapter overviews the symptoms of Alzheimer's. It also discusses the process of diagnosis, including how to find a physician

Genetics

This chapter discusses genetic variations that are known to cause Alzheimer's, as well as genetic testing and why it is important.

Effects

This chapter goes over the effects of Alzheimer's on the brain and body. It also covers the stages and progression of Alzheimer's.

Chapter Summaries

Treatments

This chapter explains how to navigate treatment options. It also discusses the different types of drugs that target symptoms or disease progression.

Communication

This chapter overviews how to best communicate with someone who has Alzheimer's, including things to avoid saying.

Family

This chapter is for loved one of those who have Alzheimer's. It discusses how to adjust after diagnosis, how to be a good caregiver, and home safety tips.

Additional Resources

For a comprehensive list of resources, visit the Alzheimer's Association page located at:
<https://www.alz.org/help-support/resources>



If you or someone you know believes they may be experiencing Alzheimer's symptoms, please consult with your doctor.