

**UCSF** Weill Institute for Neurosciences

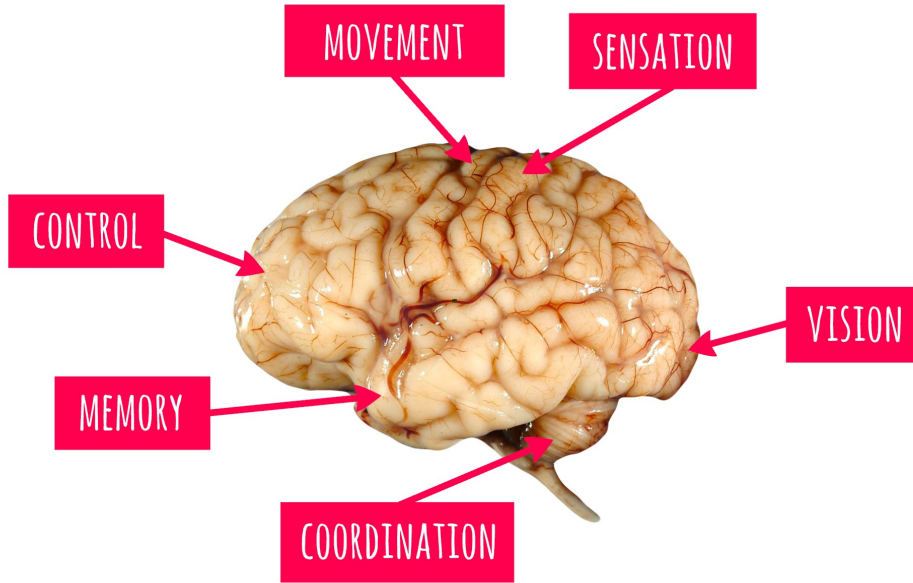
Memory and Aging Center

# Diagnosing and Managing Conditions that Cause Memory Change

**Charles Windon MD**  
**UCSF Memory and Aging Center**



# Healthy Brain Aging & Unhealthy Brain Aging



Our brain undergoes changes as it ages, like every organ

By age 80, our brain weighs less, receives less blood flow, and has fewer nerve fibers

These changes in the brain can result in changes in our ability to remember names, focus on a task, walk with perfect balance, etc.

# Healthy Brain Aging & Unhealthy Brain Aging



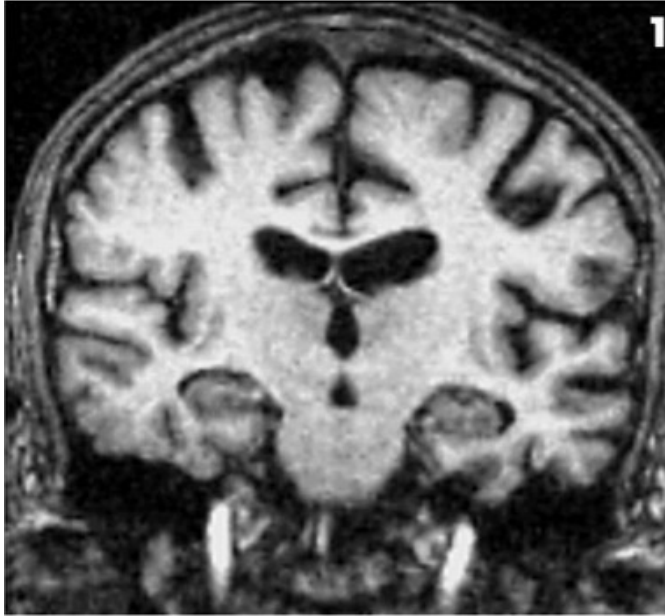
**Dementia is NOT Part of Normal Aging. Early Diagnosis is Crucial**

The brain can develop diseases that cause abnormal cognitive decline or worsen age-related cognitive decline

These diseases can occur across different ages

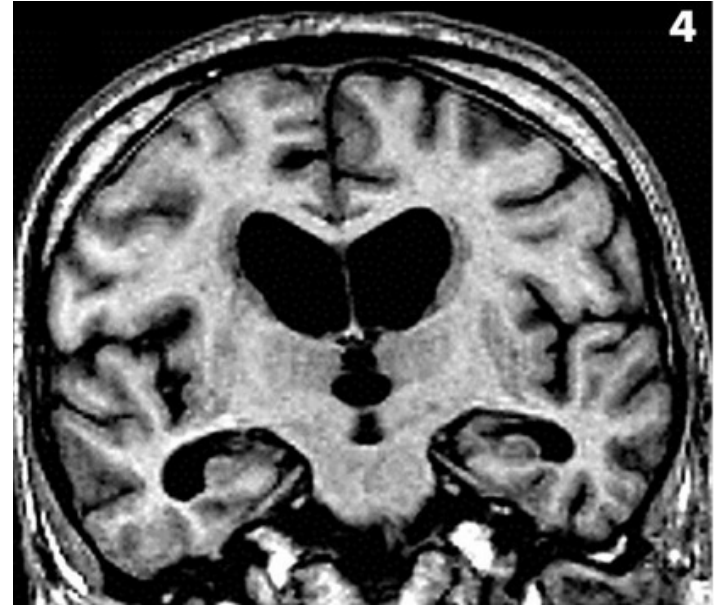
They can lead to dementia, the inability to care for self because of cognitive issues

## Early Changes



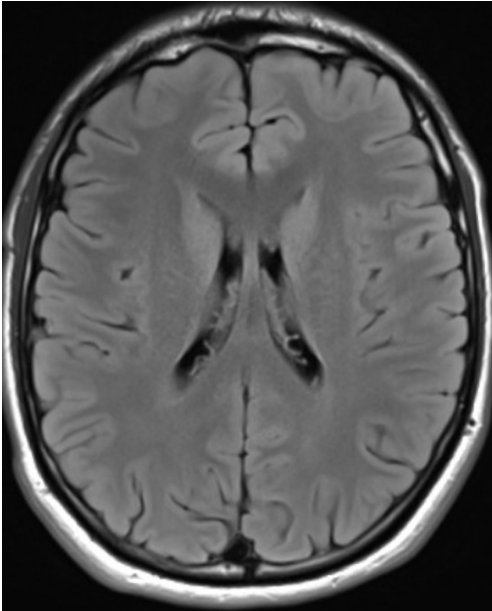
Forgetting TV show  
from yesterday

## Advanced Changes



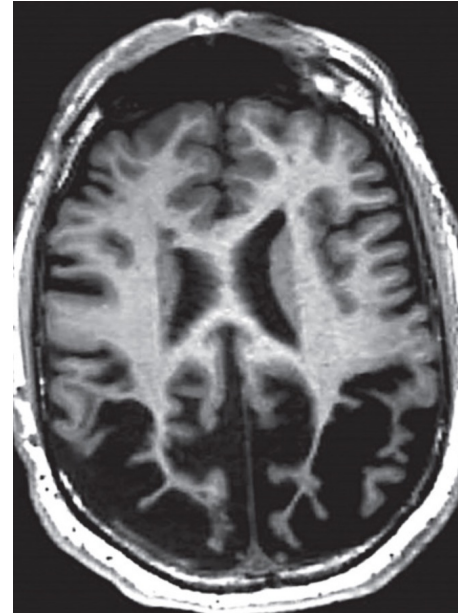
Forgetting Who  
Grandchildren are

## Early Changes



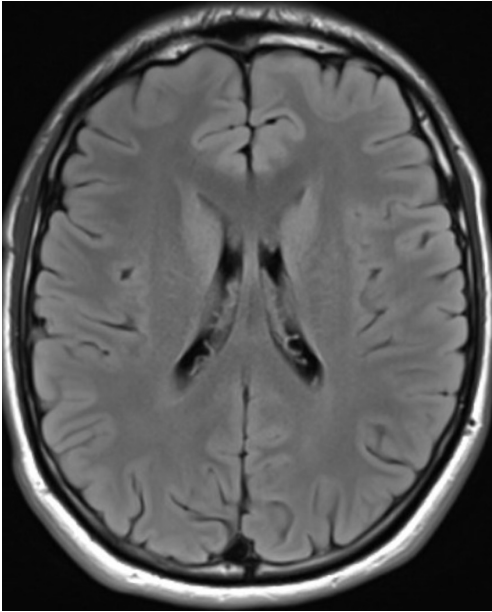
Mild Difficulty  
Finding Way Home

## Advanced Changes



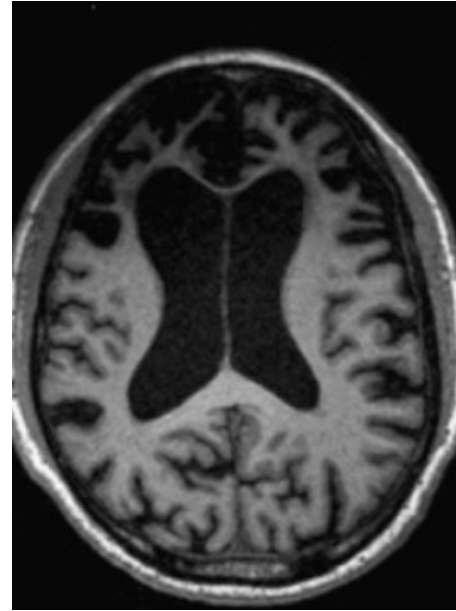
Inability to See  
Objects 2 Feet  
Away

## Early Changes



Occasional  
Inappropriate Joke

## Advanced Changes



Swearing at  
Strangers in Public



# How are Diseases, like Alzheimer's, That Cause Dementia Diagnosed?



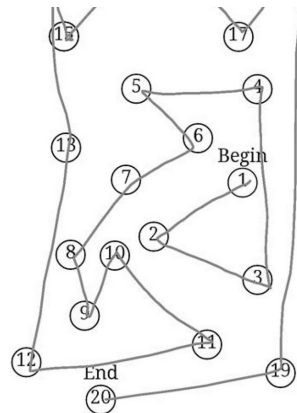
Neurological Exam

Neuropsychological Testing

Brain Imaging & Blood Tests

Special Tests

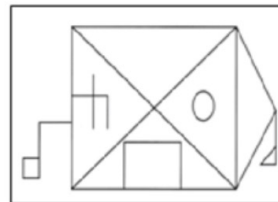
# Neurological Exam & Neuropsychological Testing



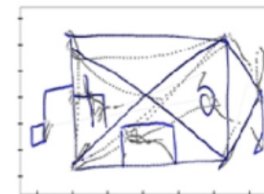
1	2	3	4
red	red	xxx	yellow
yellow	yellow	xxxxxx	blue
green	green	xxxxx	red
red	red	xxx	yellow
blue	blue	xxxx	red
green	green	xxxxx	blue
yellow	yellow	xxxxxx	green
blue	blue	xxxx	green
green	green	xxxxx	red
red	red	xxx	blue
blue	blue	xxxx	yellow
yellow	yellow	xxxxxx	green



Benson Figure

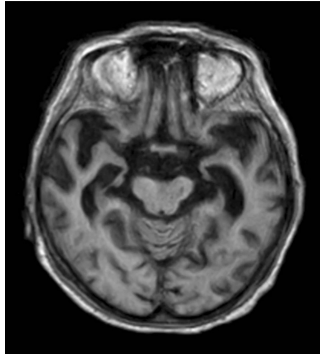


Benson Immediate

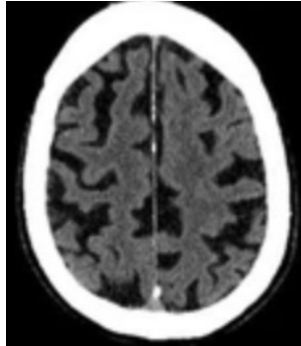




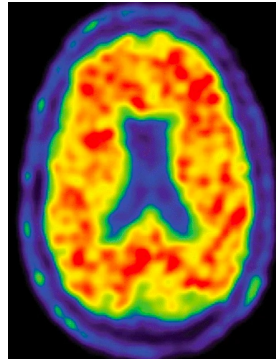
# Brain Imaging & Blood Tests



MRI



CT



Amyloid  
and Tau  
PET

Actual Proteins that build  
up in the Brain



Blood Tests

Vitamin Deficiencies, Thyroid  
Problems, Infection

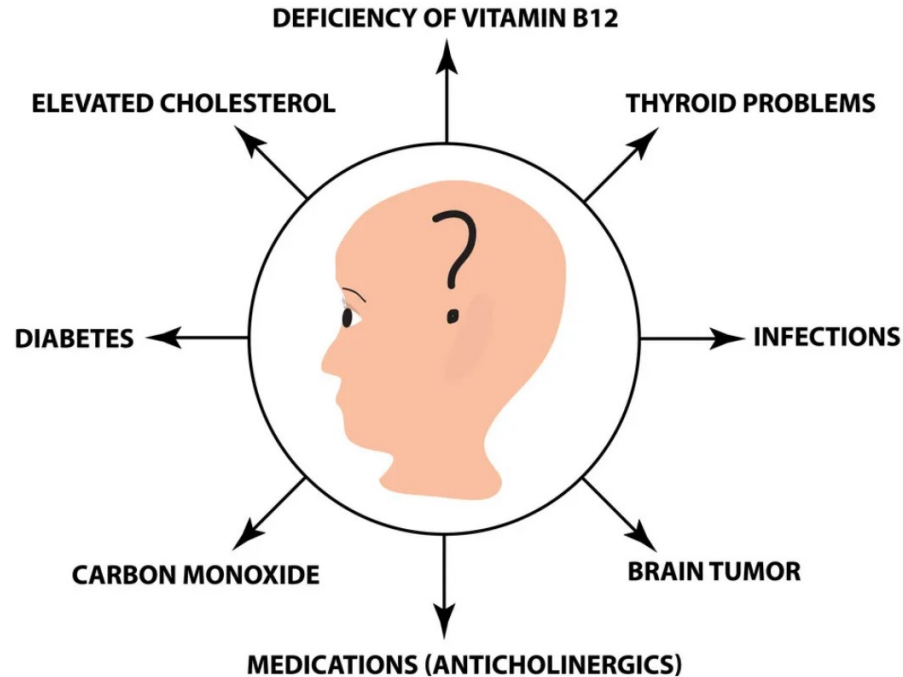
Brain Structure and Brain  
Shrinkage, Blood, Strokes

# Early Diagnosis Benefits

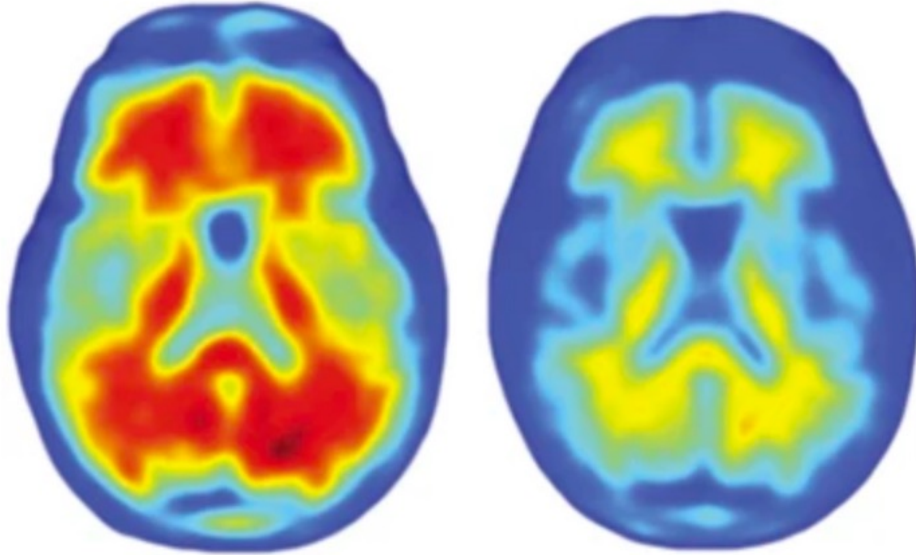
- Identify Treatable Causes of Dementia
- Medications are more effective when dementia is less severe
- Non-drug interventions are more effective at slowing progression when dementia is less severe
- More time available for medical/financial planning
- More time to plan for enjoyable activities
- Qualify for Disability if still working
- Improve Safety at home and support

# Early Diagnosis Benefits

## Identify Treatable Causes of Dementia and Treat



# Newest Therapies for Alzheimer's

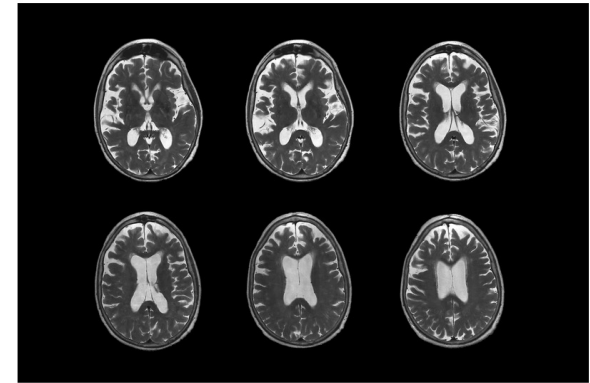


The New York Times

## ***F.D.A. Approves New Treatment for Early Alzheimer's***

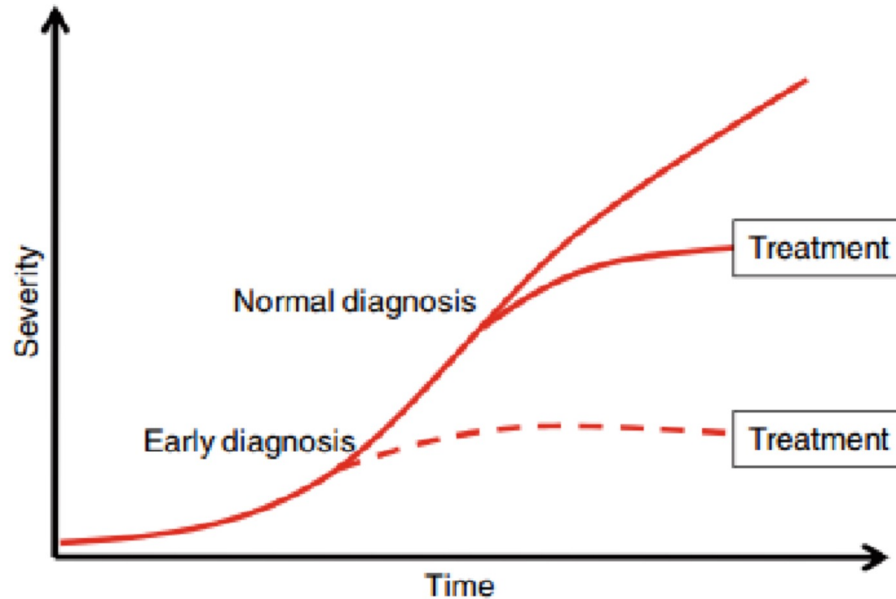
The drug, Leqembi, may modestly slow cognitive decline in early stages of the disease but carries some safety risks. Still, data suggests it is more promising than the small number of other available treatments.

 Give this article    123



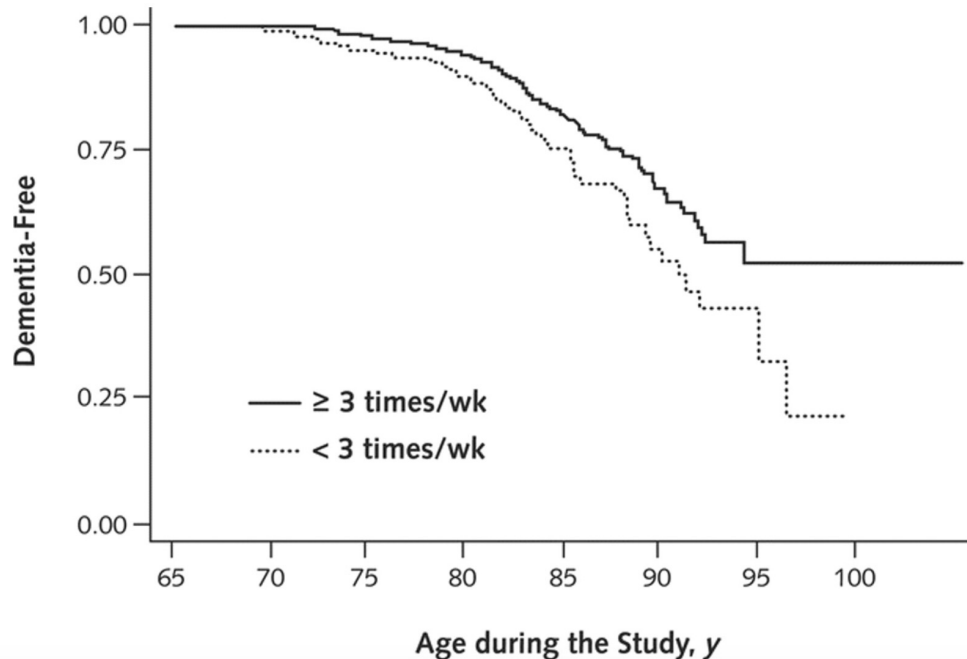
# Early Diagnosis Benefits

**Medications are more effective when dementia is less severe**



# Early Diagnosis Benefits

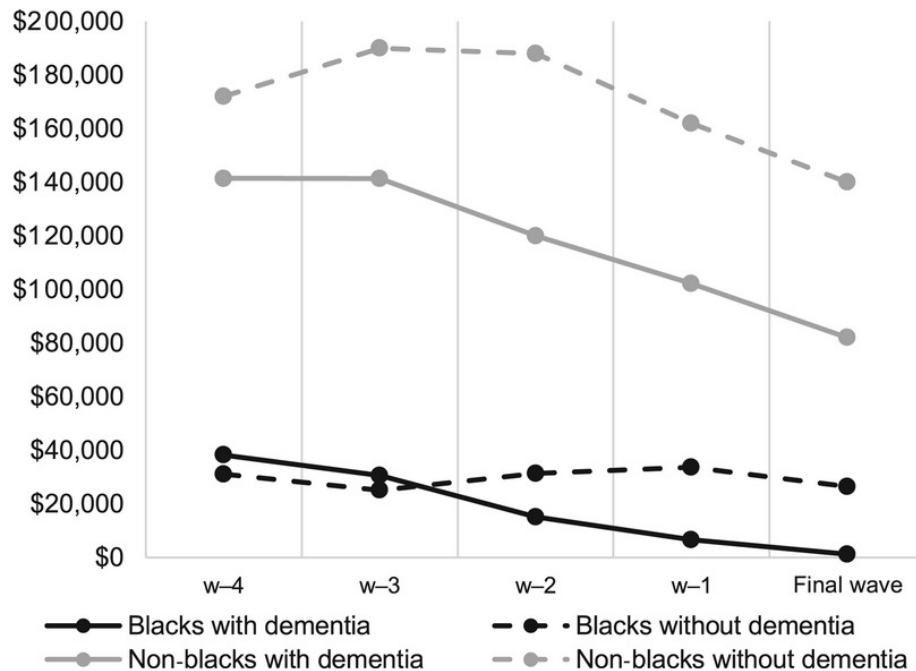
**Non-drug interventions are more effective at slowing progression when dementia is less severe**





# Early Diagnosis Benefits

**More time available for medical/financial planning**



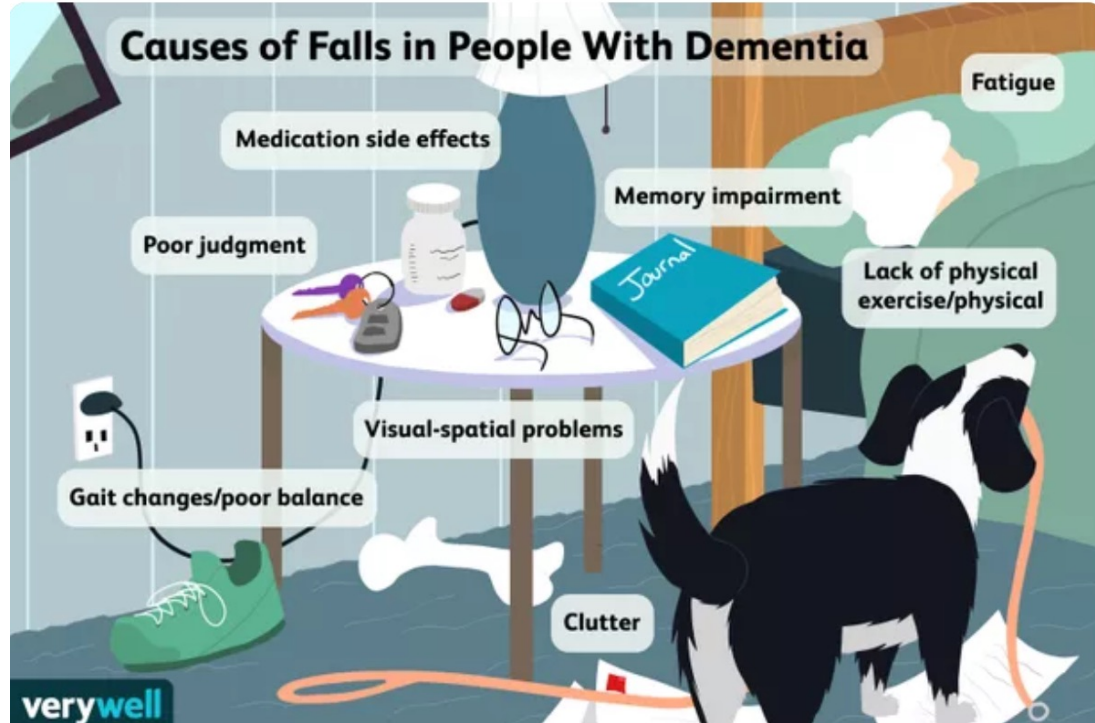
# Early Diagnosis Benefits

**More time to deliberately plan for enjoyable activities**



# Early Diagnosis Benefits

## Improve Safety at home and support



# Take Home Points

- Our brains age just like the other parts of our body
- As our brains age, they can sometimes develop disease that affects our memory and thinking
- There are many different tests that can be used to understand why someone has experienced changes in memory and thinking
- There are many benefits to **diagnosing early!!**
- **If you or someone you know is experiencing changes in memory and thinking, DON'T WAIT! SEE THE DOC!**

# Questions?

Email: [Charles.Windon@ucsf.edu](mailto:Charles.Windon@ucsf.edu)

Phone: 310-702-9297

UCSF

University of California  
San Francisco