



Understanding Dementia 101:
*Signs & Symptoms
of Alzheimer's and other Dementias*

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caringkindnyc.org
@caringkindnyc

EDUCATION SEMINAR

*A free learning event for
individuals, families and professionals*

LIVE WEBINAR

October 16, 2024 • 6-7:15 pm EST

Understanding Dementia 101:

*Signs & Symptoms of Alzheimer's
and other Dementias*



*Alzheimer's Disease... Vascular Dementia... Mild Cognitive
Impairment. What's the difference? And what difference does it make?*

Alzheimer's and other types of dementia affect people's brains in particular ways. While some signs and symptoms overlap, others can be quite different. Understanding the type of dementia a person has can provide valuable clues into their remaining strengths and how best to support them.

Understanding Dementia 101 is a foundational three-part series to help individuals and families interested in learning more about living with an Alzheimer's or dementia diagnosis. This seminar explores the different types of dementia and how they change memory, thinking, communication, and other symptoms. Join in on these 101 introductory seminars at any time and in any order. Not sure where to start? Give us a call to talk about your needs.



Speaker: Stephani Shivers, MEd, OTR/L

Stephani is the Chief Innovation Officer at CaringKind where she leads the development of new programs and services for individuals and families impacted by dementia. With over 30 years professional experience in not-for-profit leadership and as an occupational therapist specializing in cognitive function, she is nationally recognized as a leader in community-based dementia services. Stephani is driven to 'make things better' and to improve people's quality of and engagement in life.

REGISTER LIVE or ONLINE

646-744-2900

caringkindnyc.org/monthlyeducation



*Stephani Shivers,
MEd, OTR/L*

Anne Kenny, MD

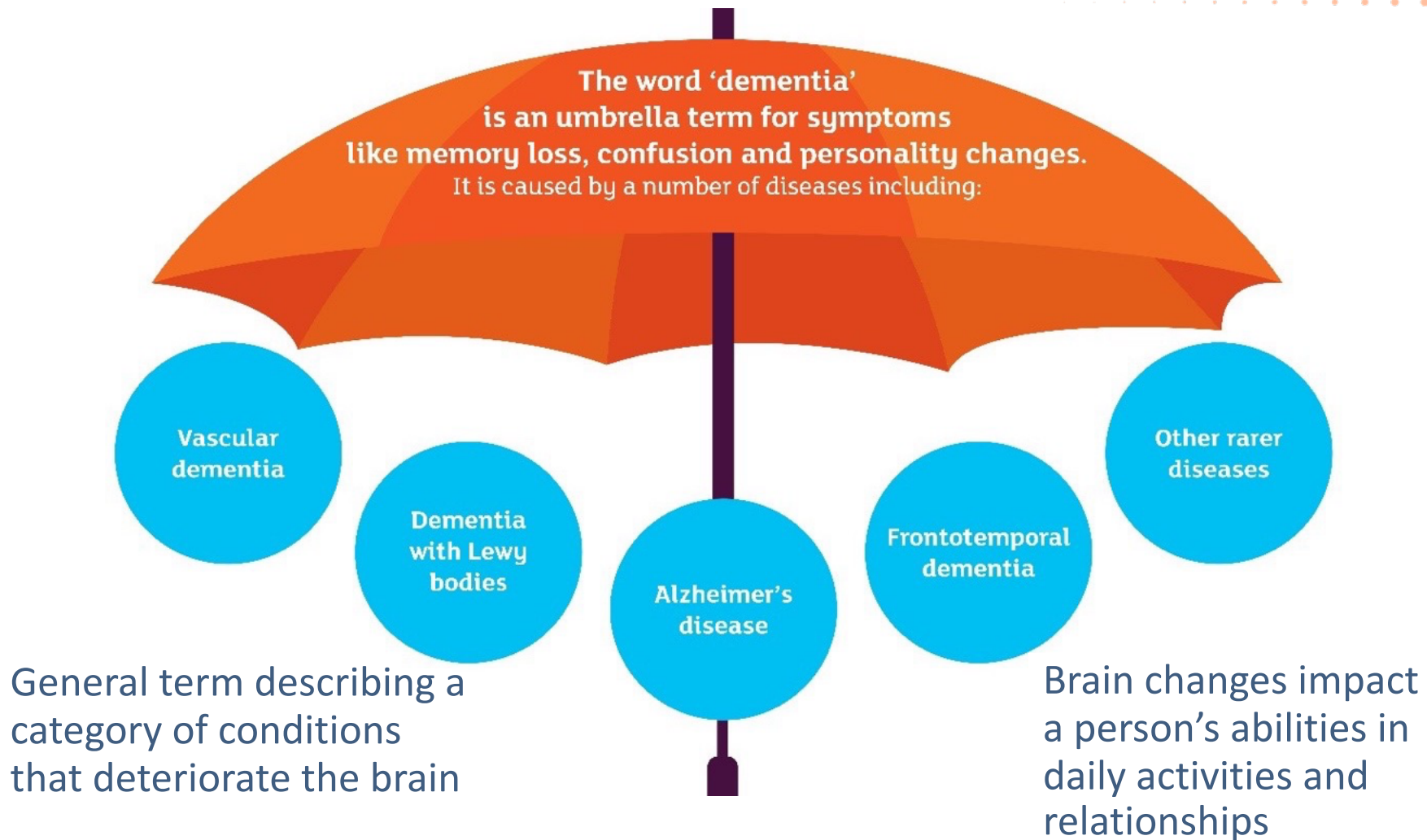


Alzheimer's
Disease... Lewy
Body... Vascular...

What's the difference?

*What difference does
it make?*

What is Dementia?





Fruits

*Apples,
Pears,
Grapes*

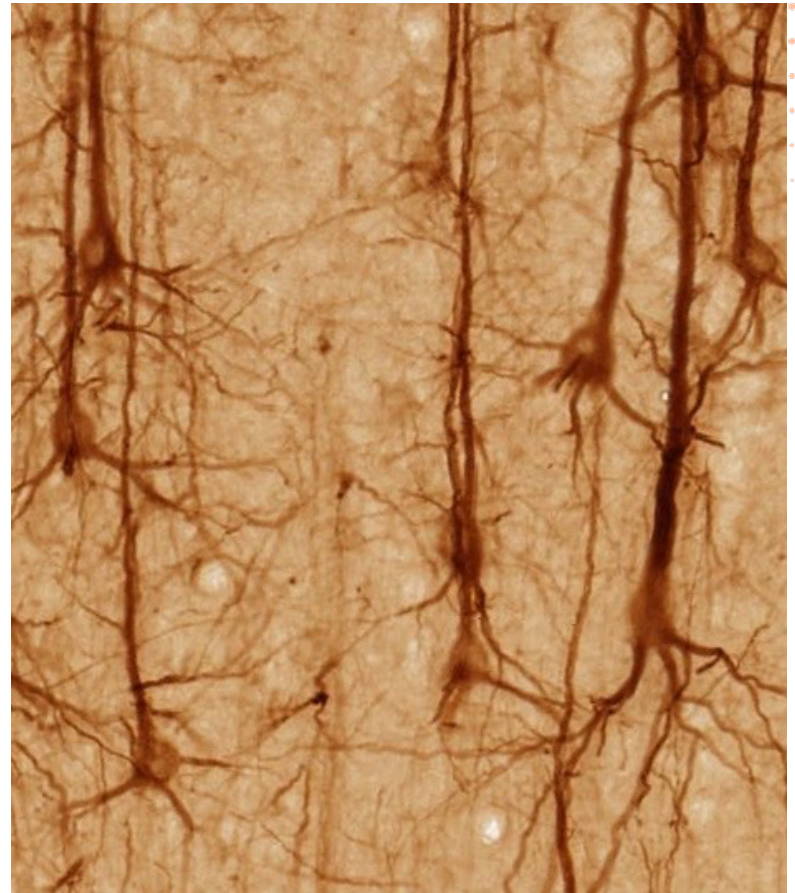
Dementia

*Alzheimer's,
Lewy Body,
Vascular*

Changes from Dementia

Brain changes cause a decline in one or more of the following areas:

- memory
- executive function
- visual spatial function
- language
- processing
- muscle movement
- sensory functions



A little brain work...

16

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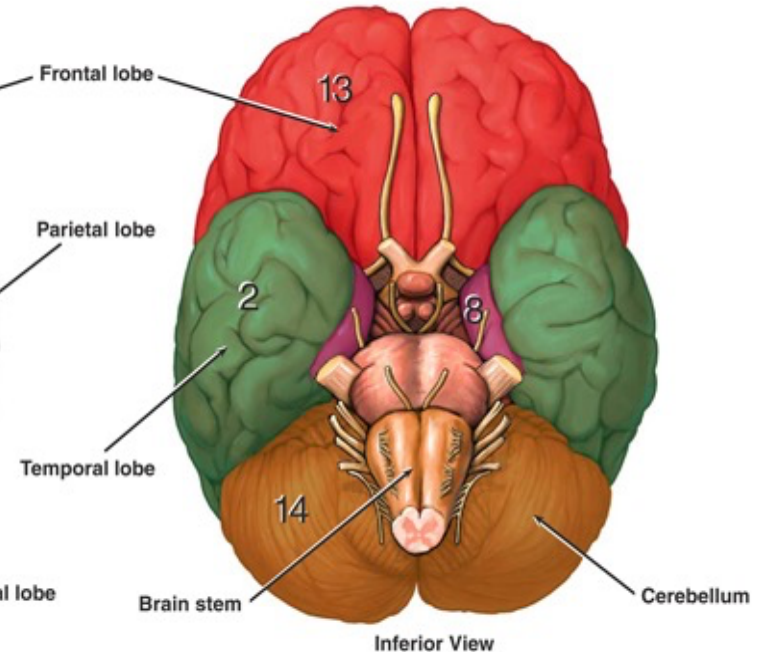
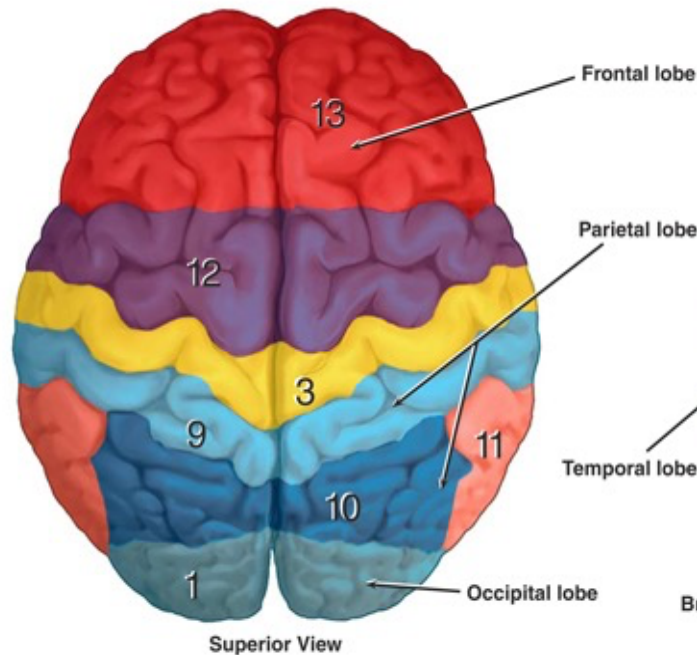
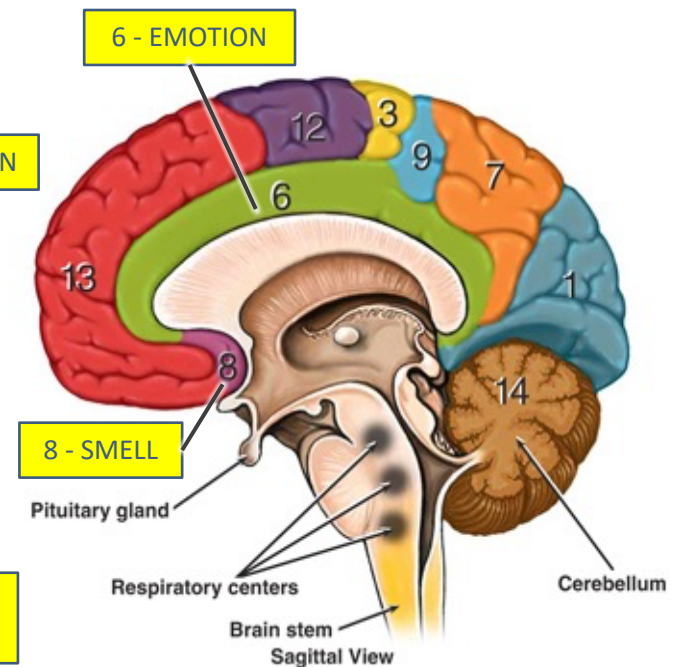
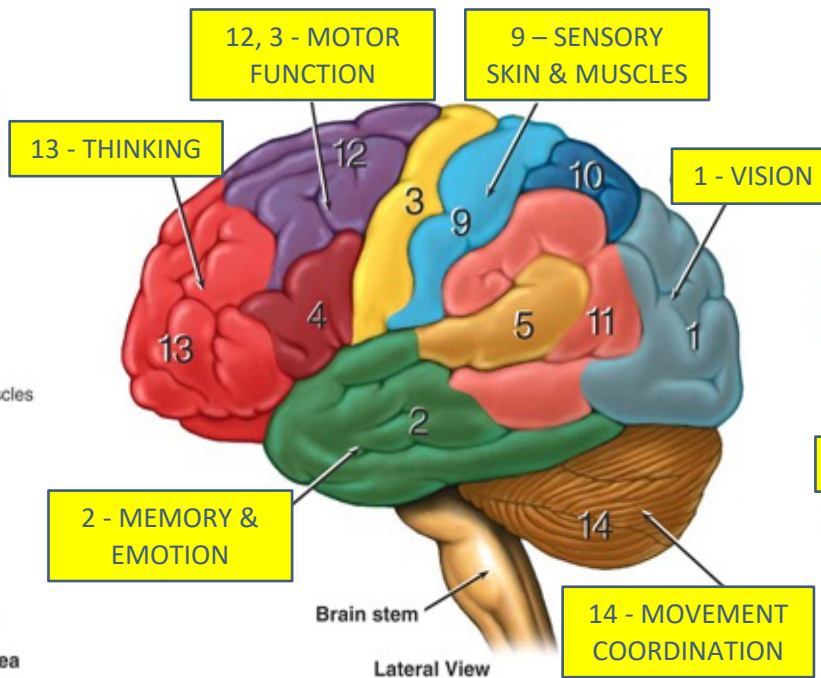


Functional Areas of the Cerebral Cortex

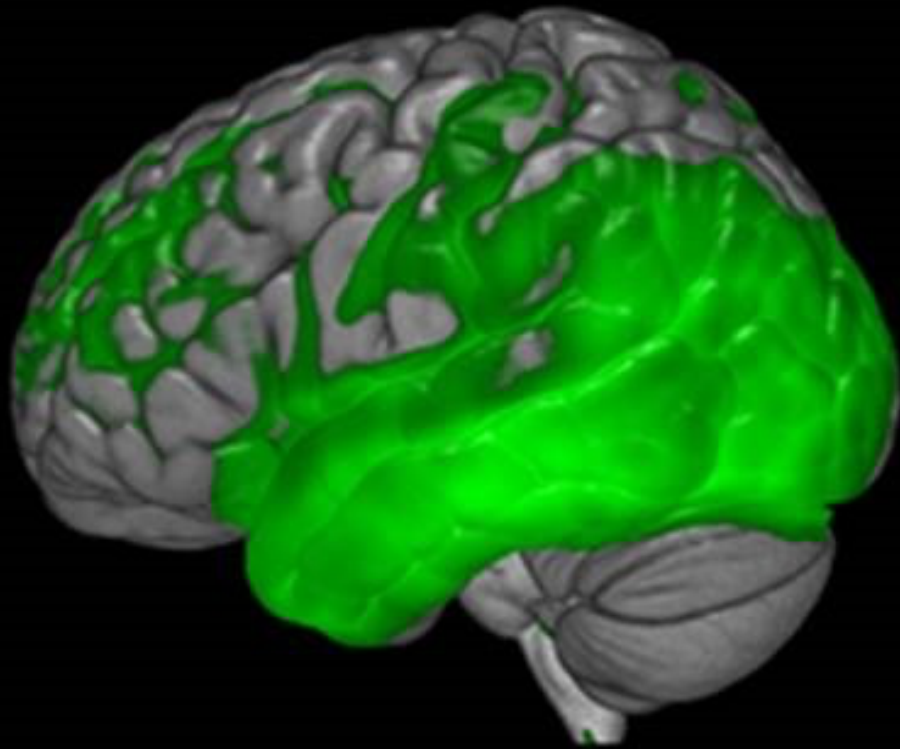
- 1 **Visual Area:**
Sight
Image recognition
Image perception
- 2 **Association Area**
Short-term memory
Equilibrium
Emotion
- 3 **Motor Function Area**
Initiation of voluntary muscles
- 4 **Broca's Area**
Muscles of speech
- 5 **Auditory Area**
Hearing
- 6 **Emotional Area**
Pain
Hunger
"Fight or flight" response
- 7 **Sensory Association Area**
- 8 **Olfactory Area**
Smelling
- 9 **Sensory Area**
Sensation from muscles and skin
- 10 **Somatosensory Association Area**
Evaluation of weight, texture, temperature, etc. for object recognition
- 11 **Wernicke's Area**
Written and spoken language comprehension
- 12 **Motor Function Area**
Eye movement and orientation
- 13 **Higher Mental Functions**
Concentration
Planning
Judgment
Emotional expression
Creativity
Inhibition

Functional Areas of the Cerebellum

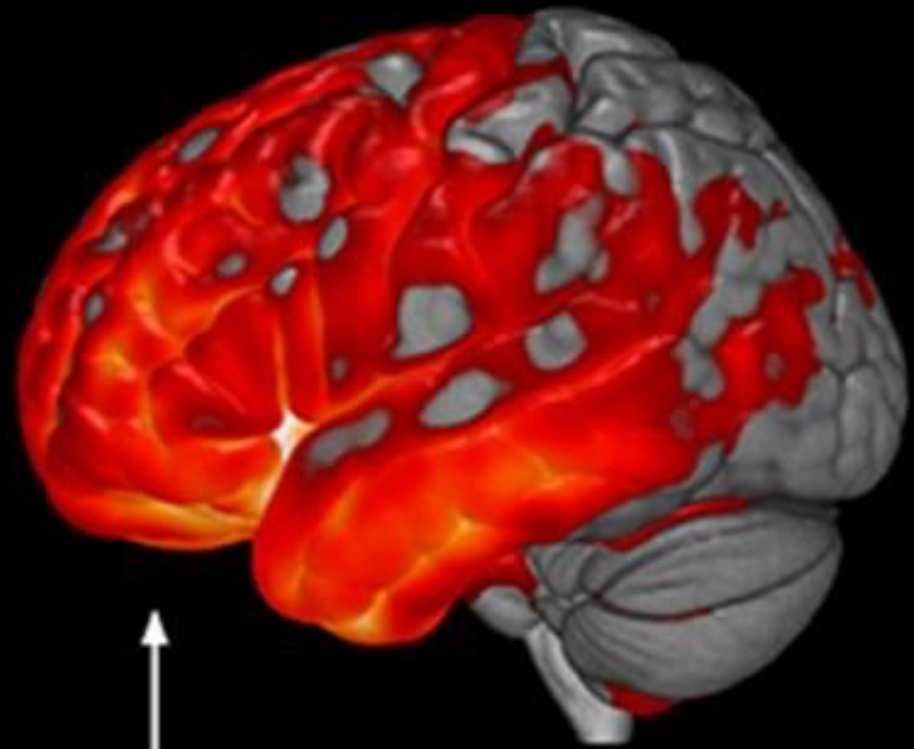
- 14 **Motor Functions**
Coordination of movement
Balance and equilibrium
Posture



Alzheimer's Disease

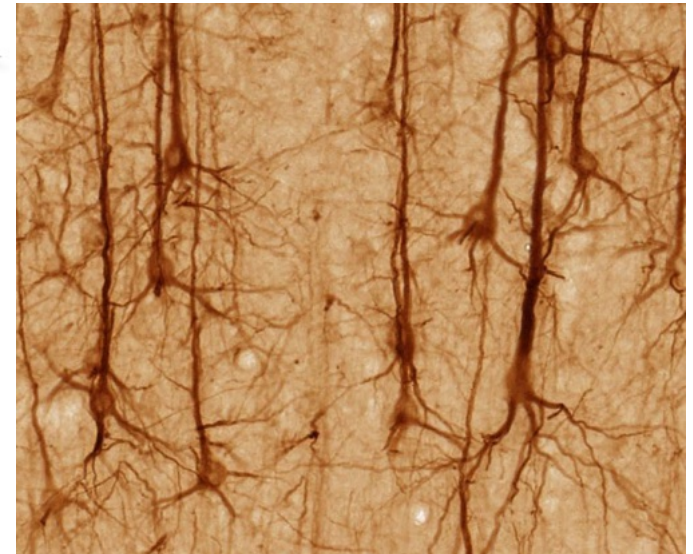
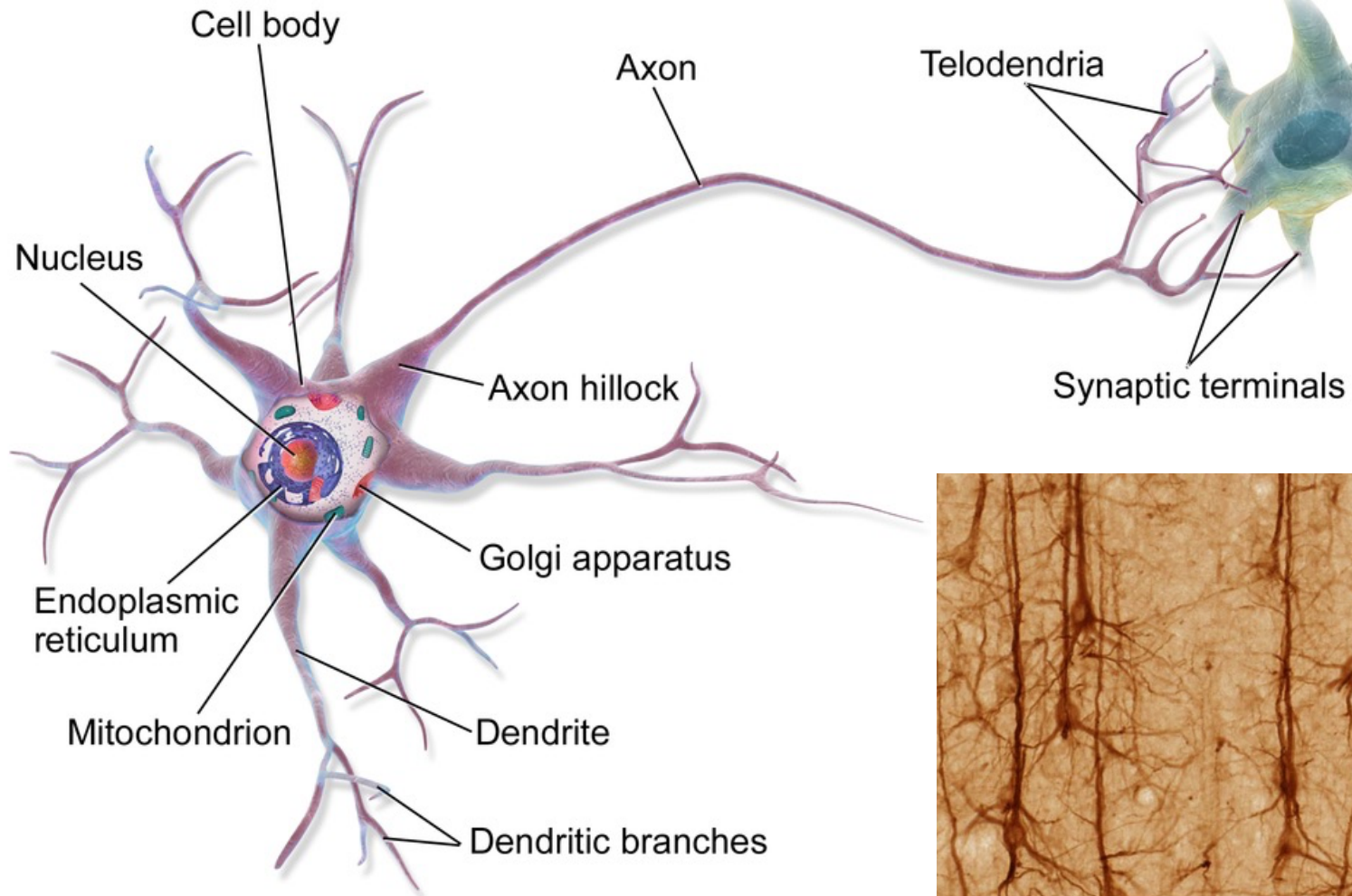


Frontotemporal Dementia



↑
frontal lobe

Brain Neuron Network





“Plaques” – Beta-Amyloid



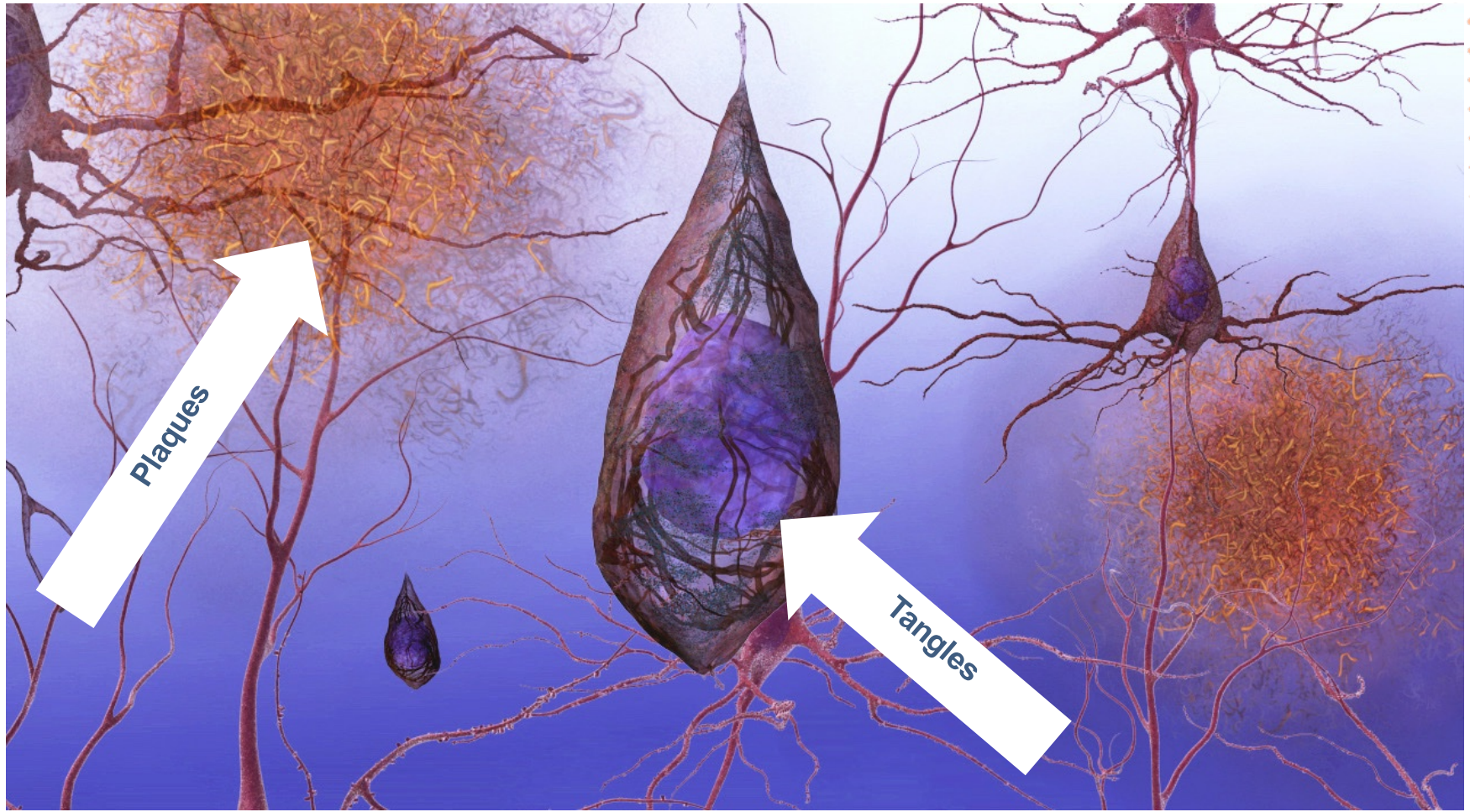
Abnormal clusters of proteins called “Plaques” build up between nerve cells

When TAU proteins tangle and twist nerve cells eventually die



Plaques & Tangles

24

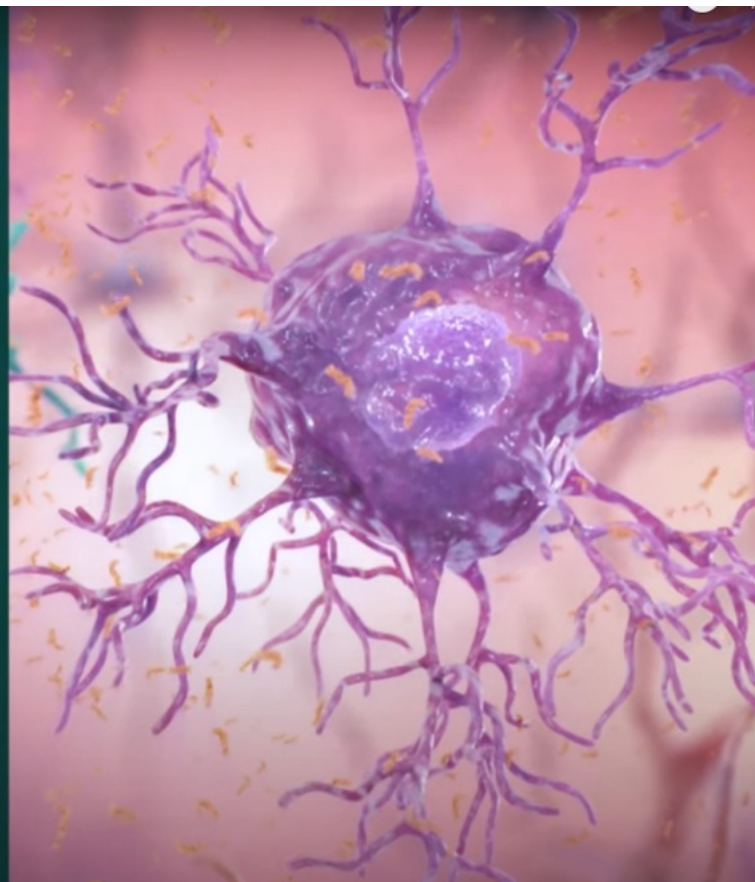




National Institute
on Aging



How Alzheimer's Changes the Brain



<https://www.nia.nih.gov/health/alzheimers-causes-and-risk-factors/what-happens-brain-alzheimers-disease>



Alzheimer's
Disease... Lewy
Body... Vascular...

What's the difference?

**PATHOLOGY –
CAUSES**

*What difference does
it make?*

**DIFFERENT
SYMPTOMS**

Understanding “Memory” & Changes

Short Term Memory



Recent Events
or “Episodes”

Long Term Memory



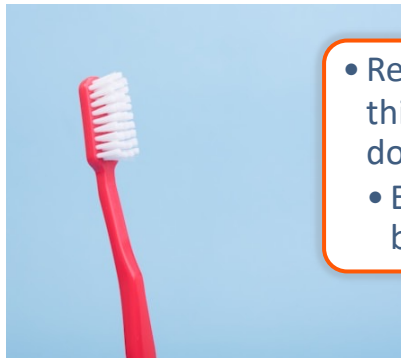
Remote
Events – old
episodes

Semantic Memory



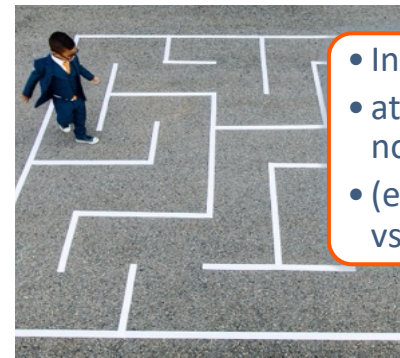
- Facts & Things
- That’s a car.
- The sun rises

Procedural Memory



- Remote pilot. Don’t think about it. Just do it
- Eg. Teeth brushing, biking

Working Memory



- Info holding in mind
- attending to right now
- (executive function vs. memory)

Understanding Language & Changes

Expressive Language

(Logic or word production)



Receptive Language

(Understanding words)

Tip of the Tongue

(eg. can't find name of thing)



Related or Wrong Word

(eg. 'brother' vs. 'husband')

Understanding Executive Function: Organization

- Executive function are higher-level cognitive skills.
- Used to control and coordinate other cognitive abilities and behaviors
- i.e. like a Chief Executive Officer



Organization

Organization – gathering information and structuring it for evaluation

- attention, planning, sequencing, problem-solving, working memory, cognitive flexibility, abstract thinking, rule acquisition, selecting relevant sensory information

Regulation

Regulation – involves evaluating the available information and modulating your responses to the environment.

- initiation of action, self-control, emotional regulation, monitoring internal and external stimuli, initiating and inhibiting context-specific behavior, moral reasoning, decision-making

Executive Function Changes

- Difficulty organizing
- Inability to multitask
- Difficulty in planning and initiation (getting started)
- Trouble planning for the future
- Difficulty processing, storing, and/or retrieving information
- Mood swings



Executive Function Changes

- Lack of concern for others
- Loss of interest in activities
- Socially inappropriate behavior
- Inability to learn from consequences from past actions
- Difficulty with abstract concepts
- Unawareness or denial that their behavior is a problem



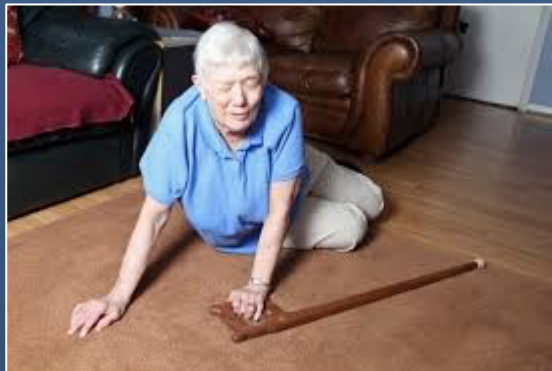
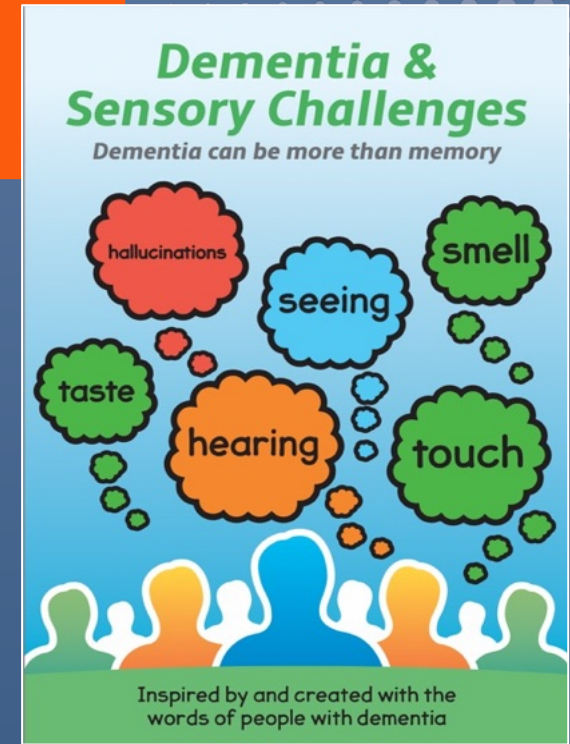
What Else is Changing?



Visual Spatial Changes



Processing Speed



Balance

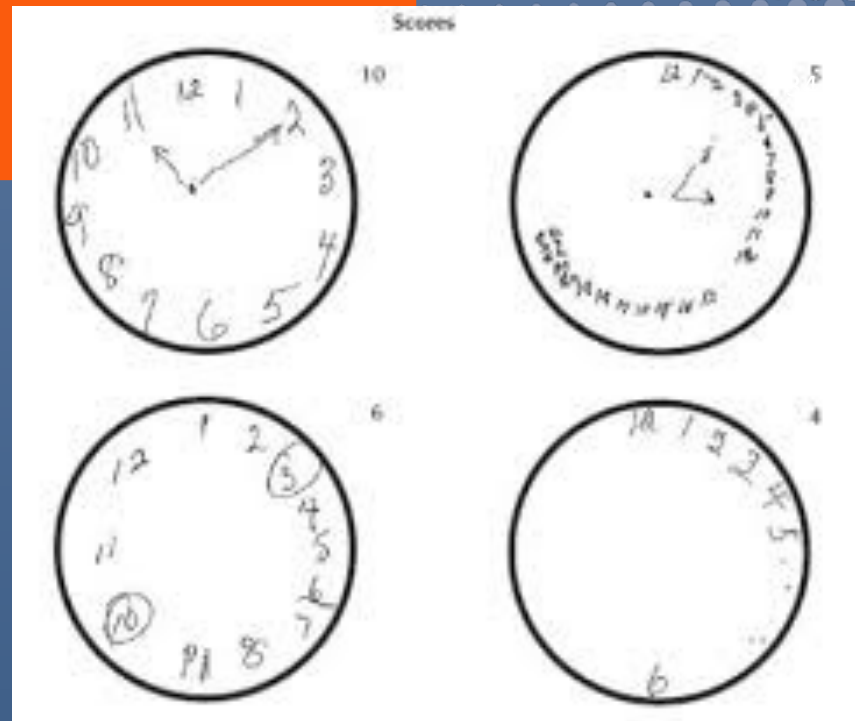
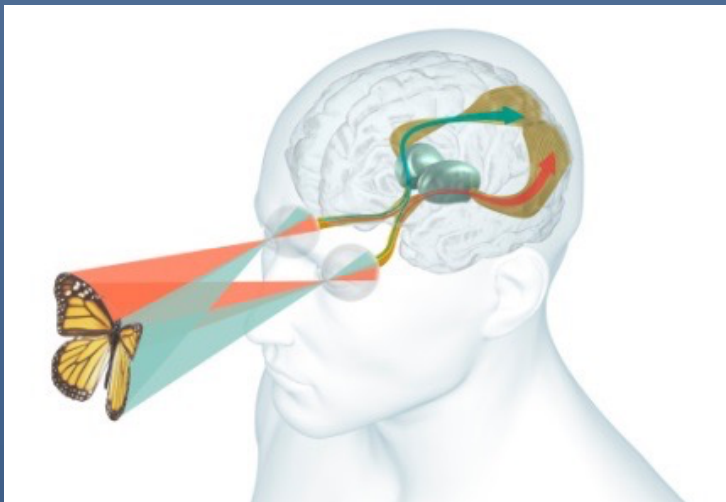


Physical Abilities



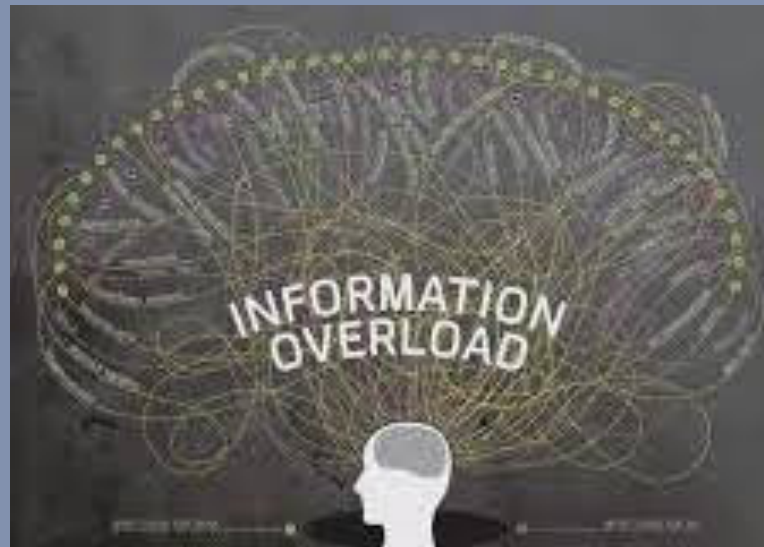
Coordination

Visual Spatial Changes



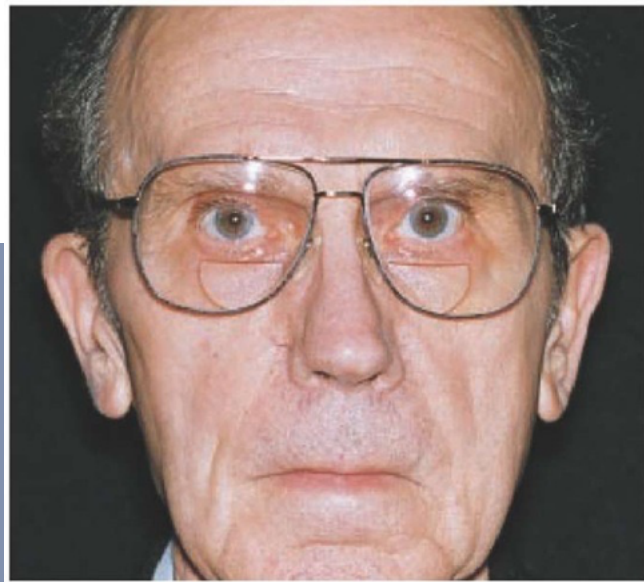
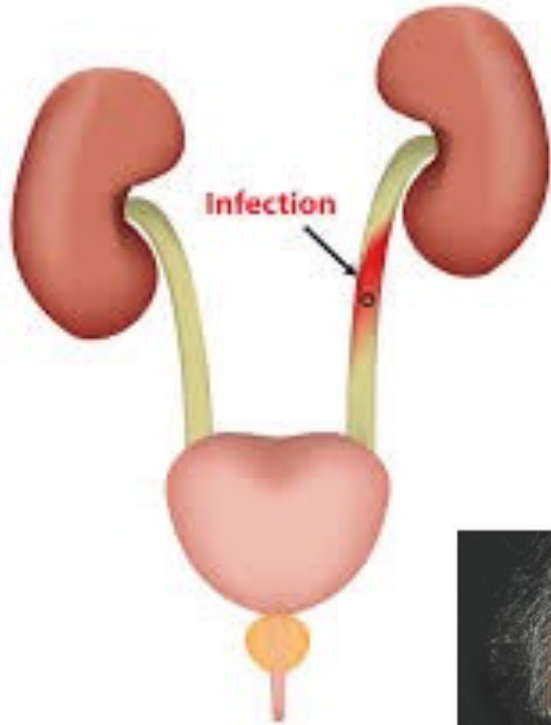
Processing Changes

35

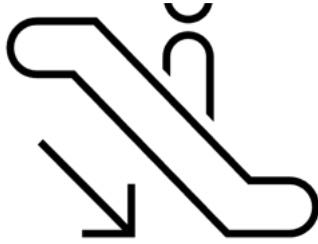


Physical Changes

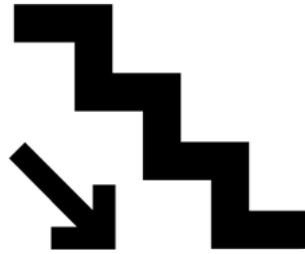
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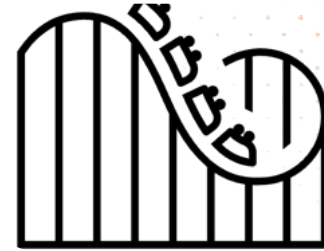
Types of Dementia



Alzheimer's
disease



Vascular
dementia



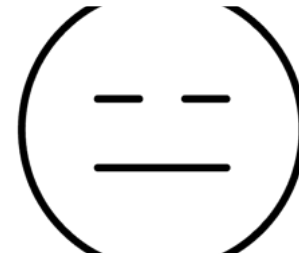
Lewy Body
Disease



Frontotemporal
Degeneration (FTD) -
Behavioral



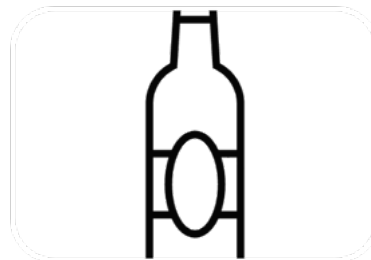
FTD: Primary
Progressive
Aphasia



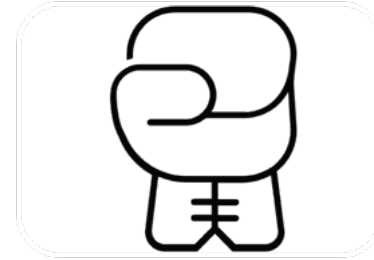
Parkinson's
Disease (Late)



Mixed
Dementia

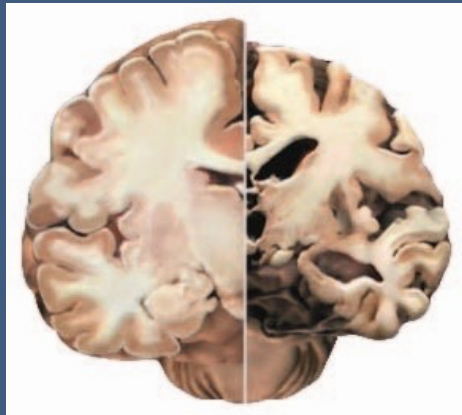


Wernicke-Korsakoff
syndrome (alcohol abuse)



Chronic Traumatic
Encephalopathy

Alzheimer's Disease



- Most common type of dementia
- Abnormal amounts of plaques and tangles in the brain
- Loss of connections between nerve cells (neurons)
- Brain changes may begin 10+ years before symptoms emerge
- Symptoms generally appear in mid 60's
- Memory problems are generally first signs
- Also impacts word-finding, vision/spatial issues, reasoning, judgment

<https://www.nia.nih.gov/health/alzheimers-disease-fact-sheet>

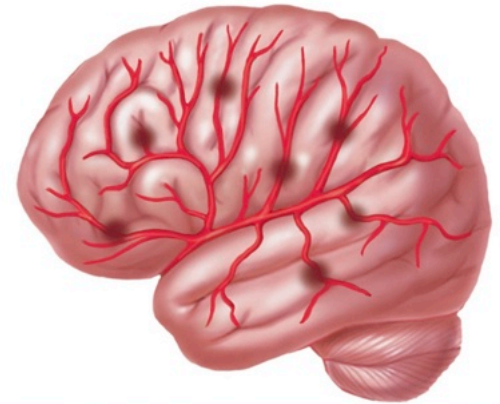
<https://www.alzheimers.gov/alzheimers-dementias/alzheimers-disease>

- Results from injuries to blood vessels that supply brain
- Symptoms similar to Alzheimer's
- Can occur with AD for “mixed dementia”
- Symptoms can begin suddenly – stepwise progression
- People can improve or worsen over time

<https://www.nia.nih.gov/health/vascular-dementia-and-vascular-cognitive-impairment-resource-list>

<https://www.alz.org/alzheimers-dementia/what-is-dementia/types-of-dementia/vascular-dementia>

Vascular Dementia/Cognitive Impairment

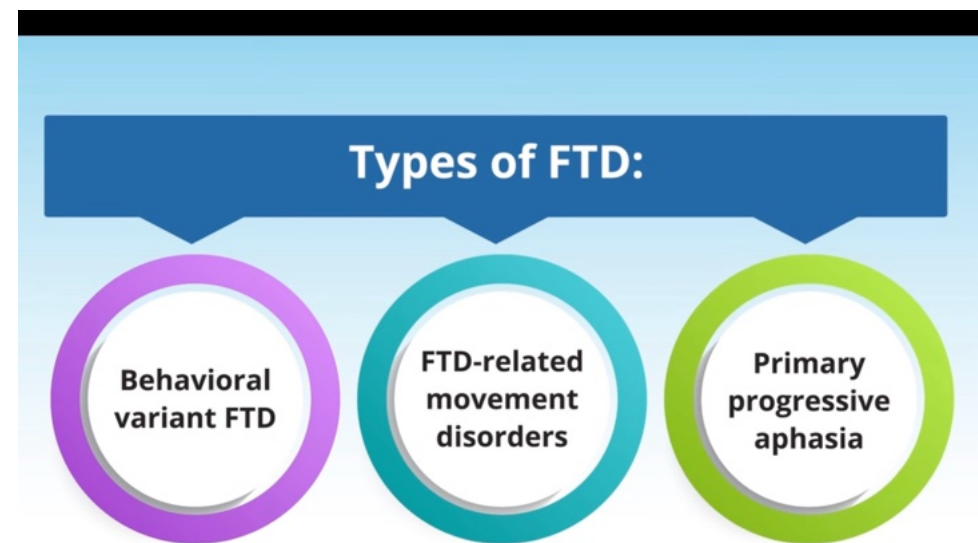
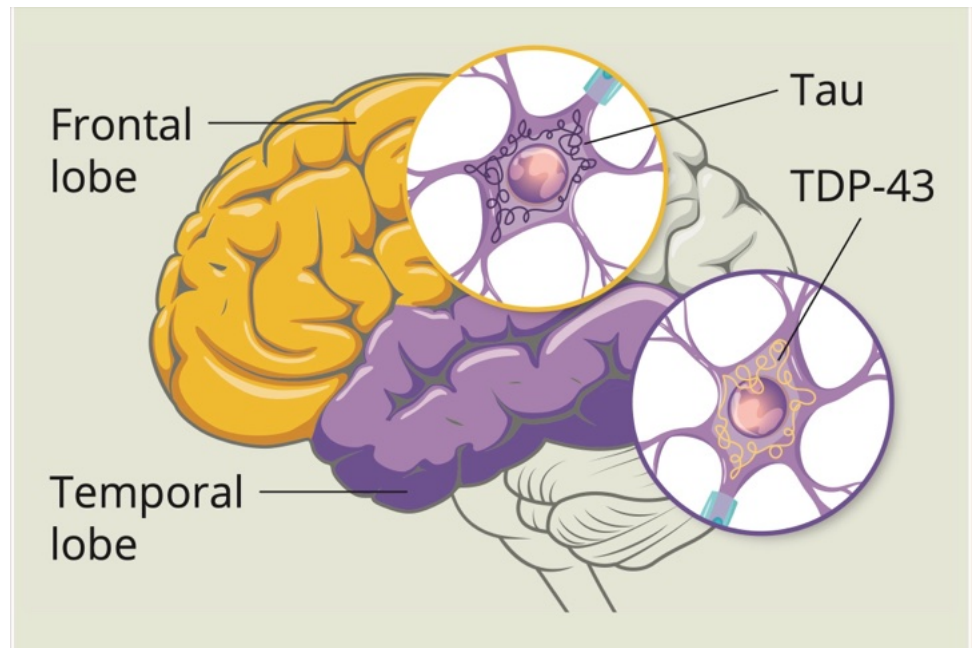


Vascular Cognitive Impairment

Iadecola, C. et al. J Am Coll Cardiol.
2019;73(25):3326-44.

Frontotemporal Degeneration (Pick's Disease)

- Caused by damage to nerve cells in frontal and temporal lobes
- Hard to diagnose because changes are similar to those of other conditions
- Can affect behavior, language, movement, emotions
- FTD is the most common dementia in people under age 60



<https://www.nia.nih.gov/health/frontotemporal-disorders>
<https://www.alz.org/alzheimers-dementia/what-is-dementia/types-of-dementia/frontotemporal-dementia>

- Abnormal proteins – Lewy bodies – affect chemicals in brain
- Early symptoms differ, but over time more similar
- Typically begins at age 50 or older, can have slow progression
- Cognitive fluctuations
- Muscle rigidity and movement problems
- Visual hallucinations
- Sleep disorder, mood changes (depression, apathy, anxiety)
- Severe problems with involuntary body functions (BP, incontinence, loss of smell)
- Extreme sensitivity to antipsychotic medications

<https://www.nia.nih.gov/health/lewy-body-dementia>

<https://lewybodyresourcecenter.org>

<https://www.lbda.org>

Lewy Body Disease & Parkinson's



Other Related Dementias

- Creutzfeldt-Jakob Disease
 - Similar to mad cow disease
 - Progresses quickly
 - Rare 1:1M
- Huntington's Disease
 - Genetic disorder
 - Transmitted to children
 - Develops between 30-50
 - Uncontrollable movements
- Korsakoff Syndrome
 - Severe thiamine deficiency (vitamin B-1)
 - Often from alcohol misuse
- Down Syndrome & Alzheimer's
 - Extra gene
 - Significant increase in risk for AD
 - 30% age 40, 50% age 50



Alzheimer's
Disease... Lewy
Body... Vascular...

What's the difference?

*What difference does
it make?*

**LIVING WITH
COGNITIVE DISABILITY**

SUPPORT STRENGTHS

**FOCUS ON WELL-
BEING**

Dementia – A Cognitive Disability



“I’m not dying from a disease, I’m living with a chronic, cognitive disability”

– Richard Taylor

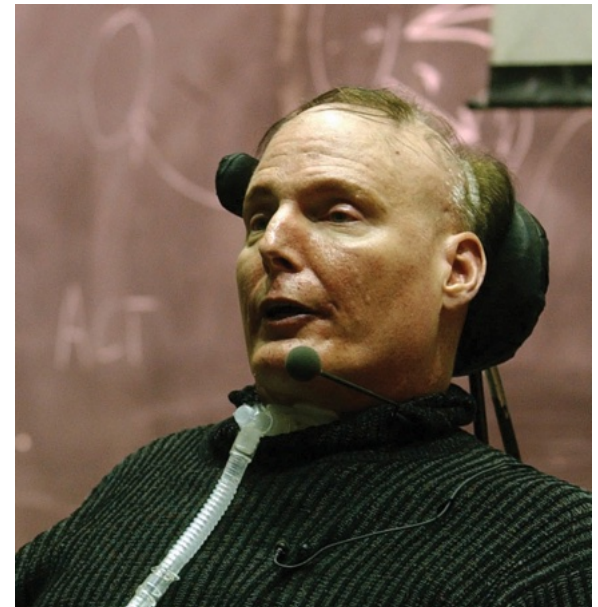
“It is clear we need to move from the medical model of care to one that is based on a social and disability pathway of support and care... A key issue in changing this is recognizing the symptoms of dementia as disabilities... The symptoms caused by dementia are cognitive disabilities”

– Kate Swaffer



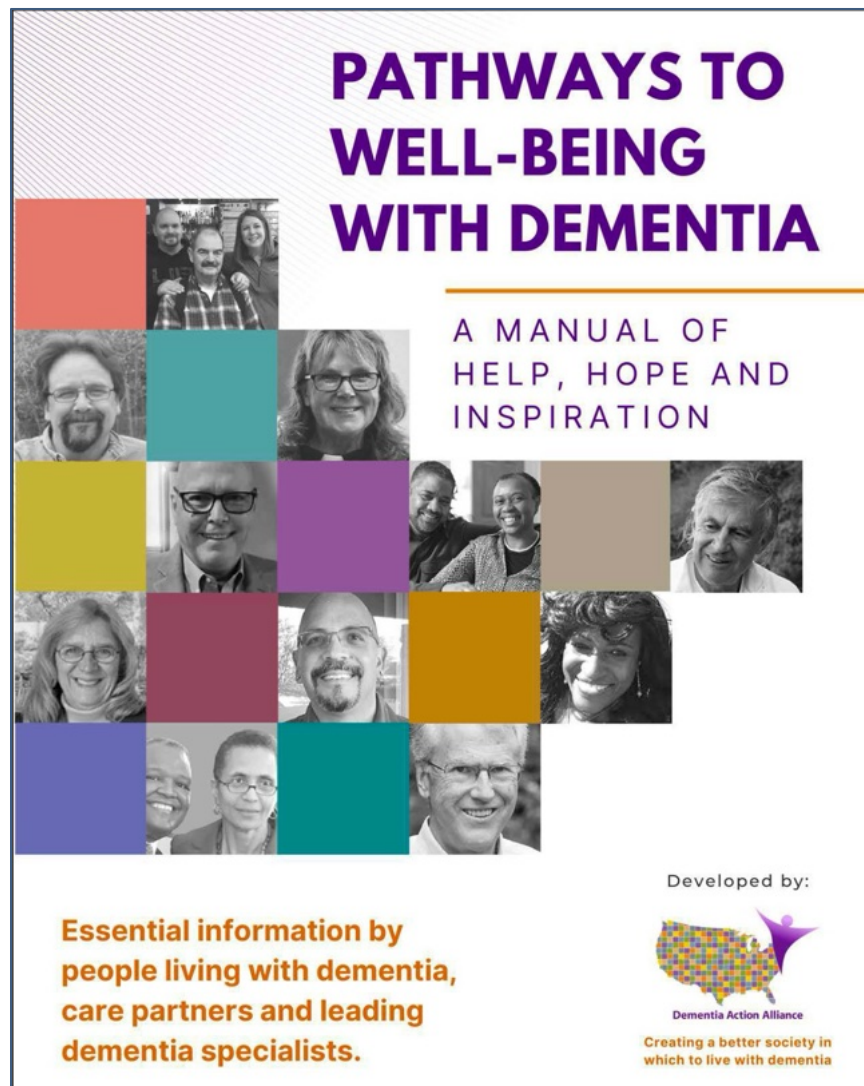
Focus on Strengths & Abilities

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Supporting Well-Being

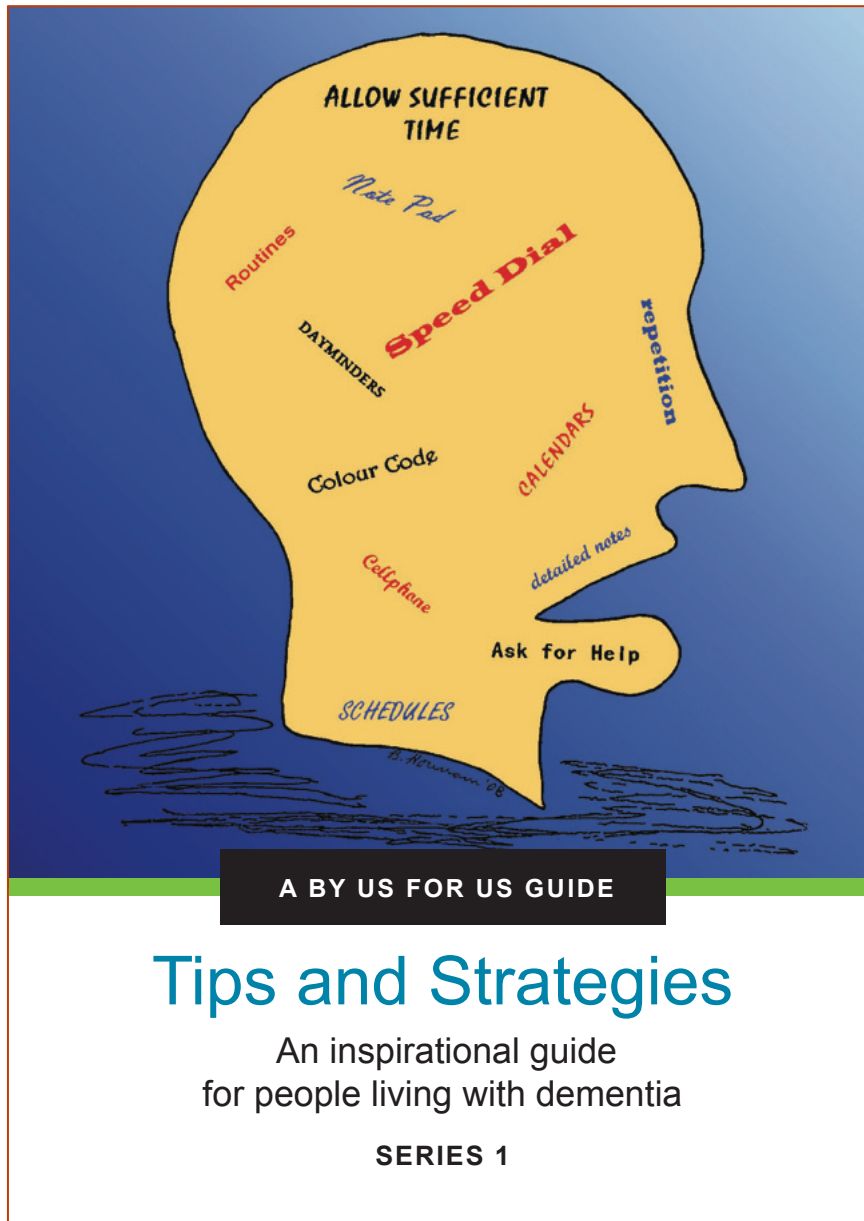
- Stay connected
- Find fun and interesting things to do and stay engaged
- Limit stress and stressful experiences
- Eat and drink healthily
- Get restorative sleep
- Be physically active
- Keep your spirits up



Dementia Action Alliance, et.al., 2022.
Pathways to Well-Being with Dementia: A Manual of Help, Hope & Inspiration.

Strategies

- Add safeguards
- Minimize stress
- Visual aides
- Technology assistance
- Develop routines
- Keep life simple
- Keep your sense of humor
- Plan ahead
- Communicate your needs
- Connect to peers



A BY US FOR US GUIDE

Tips and Strategies

An inspirational guide
for people living with dementia

SERIES 1

Meaningful Engagement

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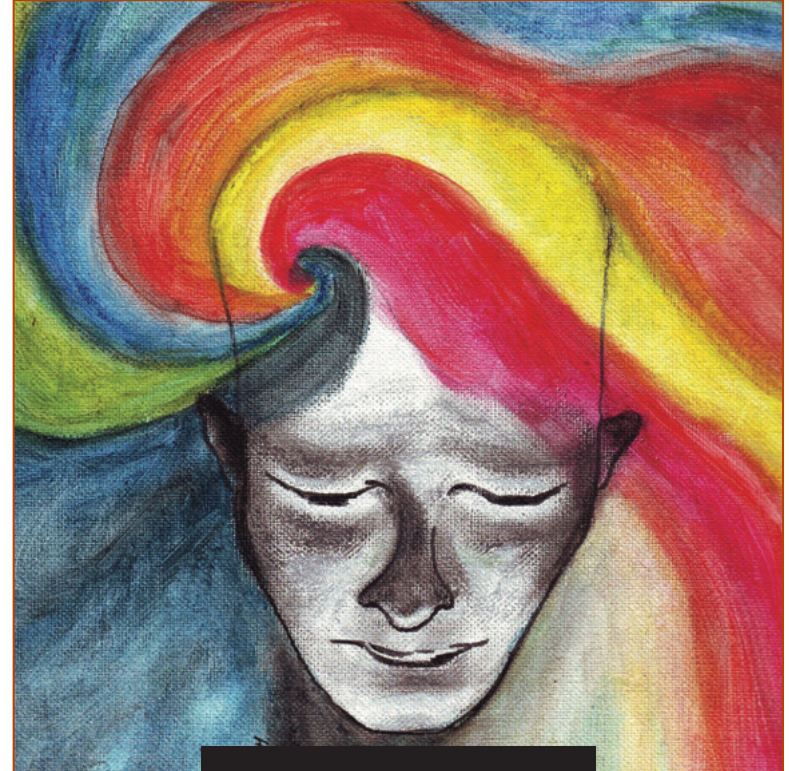


A BY US FOR US GUIDE

Role, Health and Well-being

An inspirational guide for care partners
of people living with dementia

SERIES 3



A BY US FOR US GUIDE

Living and Celebrating Life through Leisure

An inspirational guide
for people living with dementia

SERIES 1



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THANK YOU!





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QUESTIONS?

