


What we will cover:

- Age-related changes to our brains and bodies
- What do we know about Alzheimer's and dementia
 - Where's the science?
 - What is my risk?
- A Strength and resilience approach brain aging
 - How to approach personal prevention
- Resources
 - Website resources

Normal Age-Related changes

- Brain
 - Mild changes in memory and rate of information processing
 - Changes do not progressively worsen
 - Does not interfere with daily function
- Body
 - Physical activity may become more challenging
 - Changes to hearing and sight
 - May be harder to see things up close and be more challenging to hear



**We combat this
by STAYING
ACTIVE!**

MYTH!

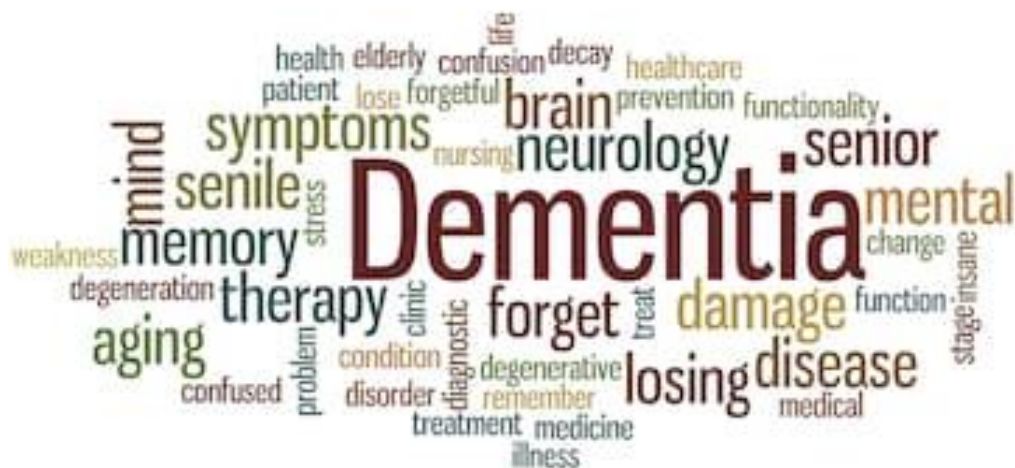
There are also many health changes that have been normalized, but science shows they can be prevented or addressed

Changes in memory

When we talk about changes in memory, there are a lot of different terms used!

- “changes in memory and thinking,”
- “mild cognitive impairment,”
- “dementia,”
- “Alzheimer’s”

Let’s break them down...



Changes in memory

- In class, we tend to use the term “**changes in memory**”
 - When we use this term, we are referring to general changes in memory and thinking
 - These changes may be reversible OR permanent
 - Some of these changes might not cause too much worry OR they might be impacting our daily life
- *We choose to use this term because people experience many different kinds of changes in memory or thinking so it is important that we use a term that is as inclusive as possible*



So what about Mild Cognitive Impairment?

- Some of us may experience changes in memory and thinking that are pretty consistent and often long-term, but they are able to keep up with their daily life
- After ruling out other potential, treatable causes of the changes in memory, someone might receive a diagnosis of mild cognitive impairment (or 'MCI' for short).
- MCI is **not** dementia. Though it is also **not** a part of normal aging, MCI typically does not cause much trouble when you go about your day

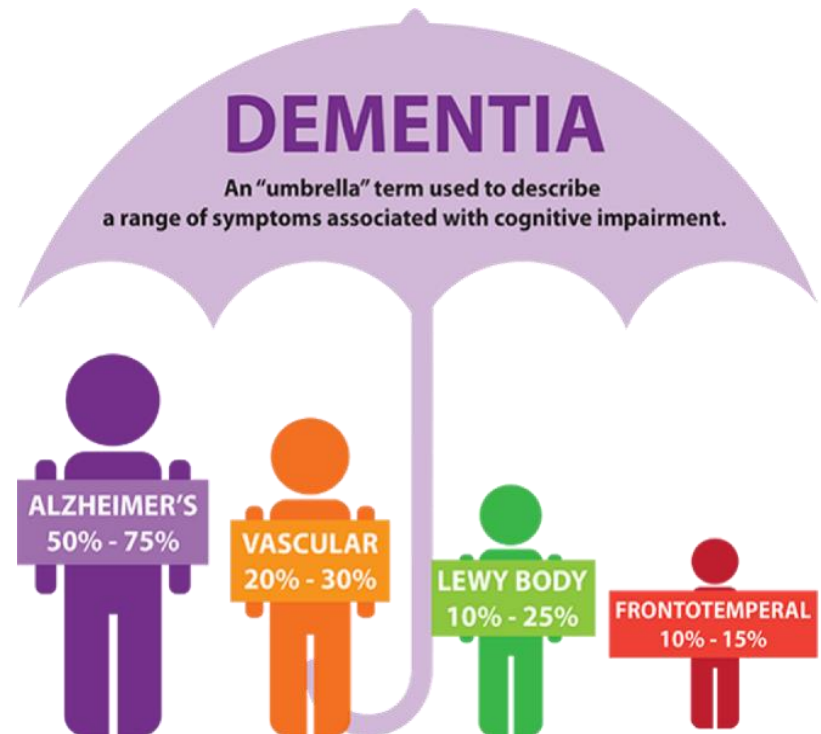


MCI may or may not progress to form of dementia

So then, what is dementia?

- When someone experiences changes in memory, thinking, and reasoning that their ability to manage daily life, they may be experiencing dementia.
- It is not one specific disease; instead, it is an umbrella term that includes many different types of diseases.
- Different types of dementia can have some different symptoms, but in general they all impact memory, thinking, and function.

- Alzheimer's disease (50-60%)
- Lewy body disease (15-20%)
- Vascular dementia (15-20%)
- Parkinson's dementia (1-3%)
- Frontotemporal dementia (1-2%)

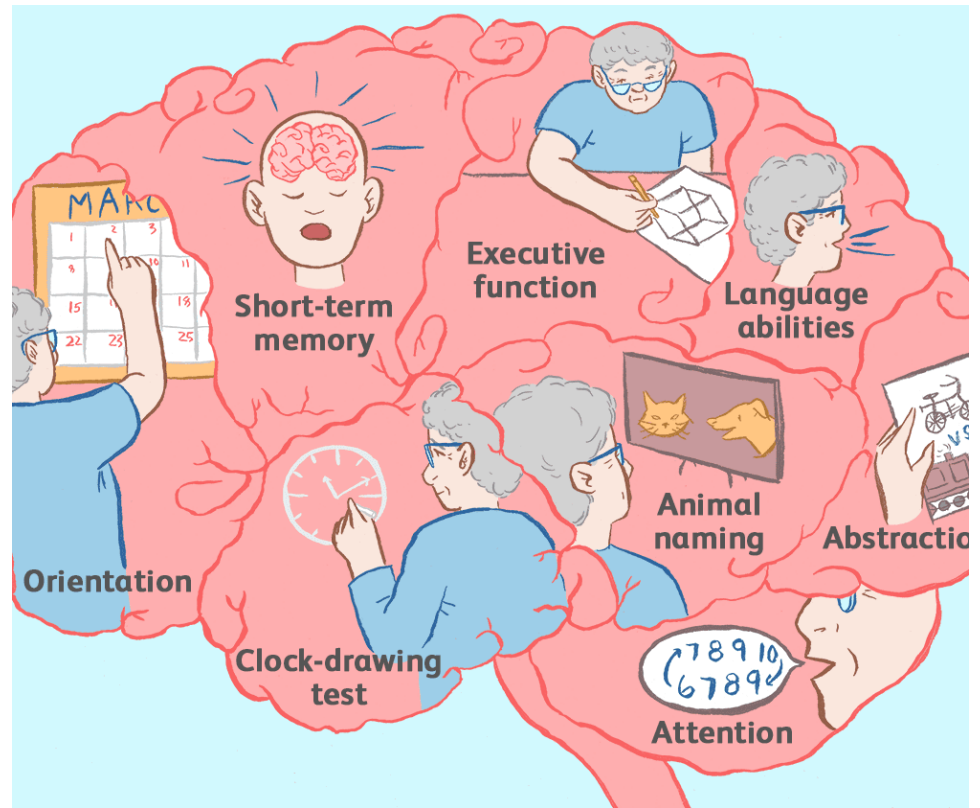


So then, what is dementia?

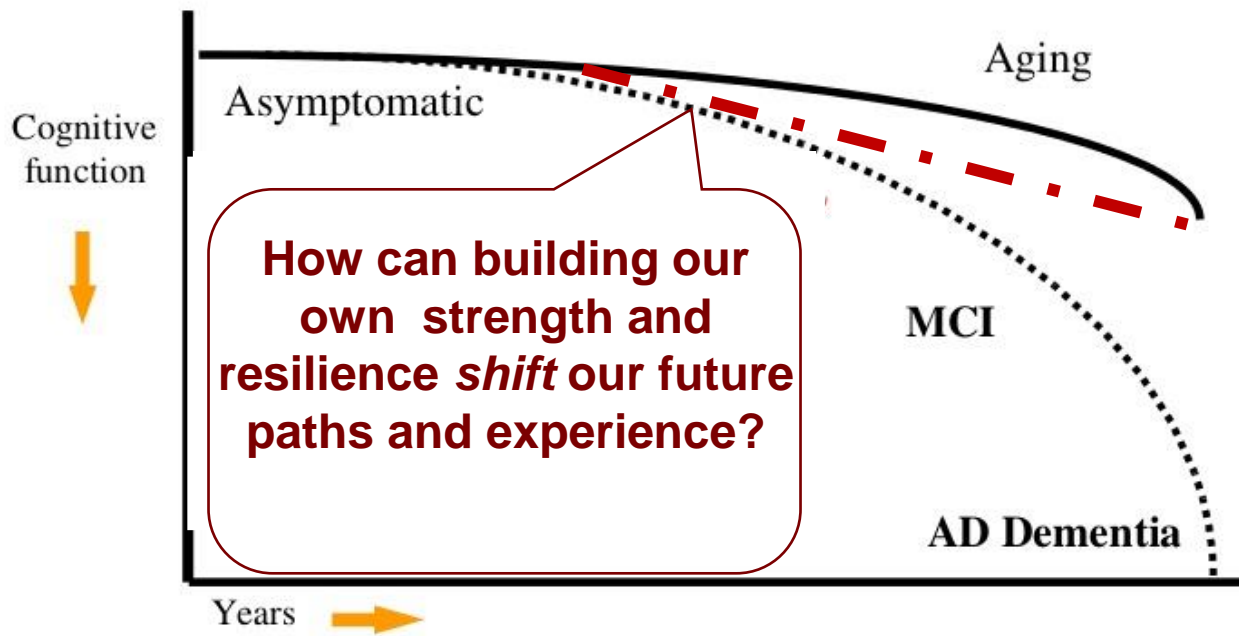
- In dementia, people experience changes to **memory** and one or more of the following cognitive deficits:

- ❖ **Language**
- ❖ **Movement**
- ❖ **Recognizing common things**
- ❖ **Executive functioning**

- Disrupts daily life, relationships or work
- Difference from normal
- Gradually progresses



How does it progress over time?



Prevalence

- 5% people over age 65
- 35-50% over 85

Let's talk about Alzheimer's disease

- Alzheimer's disease is the most common cause of dementia
- It is usually progressive, and over time, it impacts our day-to-day functioning, mood and personality
- More than five million Americans are currently living with Alzheimer's disease
- Often characterized by the buildup of **amyloid plaques**, abnormal clusters of protein between neurons, and **neurofibrillary tangles**, which are twisted strands of protein that form inside the neuron
- Both plaques and tangles accumulate more and more as dementia progresses, further preventing our brain cells from communicating and leading to cell death



Things to Rule Out

These are some potentially modifiable causes of dementia, that are often reviewed before diagnosis

- Medications
- Alcohol
- Metabolic causes (for example, B12 deficiency)
- Depression
- Brain tumors



Research on Dementia and Alzheimer's

- Unfortunately, we do not yet have an effective treatment for Alzheimer's and related forms of dementia
- But the government is investing **many** more resources than ever before into science to help us better understand how these changes develop
- This is a field of science that is evolving very rapidly with new information being learned every day



How to think about Personal Risk

These risk factors are specific to Alzheimer's Disease, but many of them are common across dementias:

- Age - Prevalence doubles every 5 years after age 60
- Family History
 - Fourfold increase risk overall. The presence of the ApoE4 allele increases risk but is **not predictive**
- Gender
 - Woman more than men, in part because they live longer
- Head Trauma
 - Repeated, especially in men
- Personal history of Down's Syndrome
- Cognitive Stimulation and mental activity
- Estrogen plus progesterone
- Environment, Hypertension, Elevated Cholesterol, Depression



Heart Health Builds Brain Health

- We are also learning more about the strong linkage between our heart health and brain health
- In another type of dementia, called vascular dementia, our brains experience damage from impaired blood flow
- So the health of our brain's blood vessels is closely linked to our overall heart health

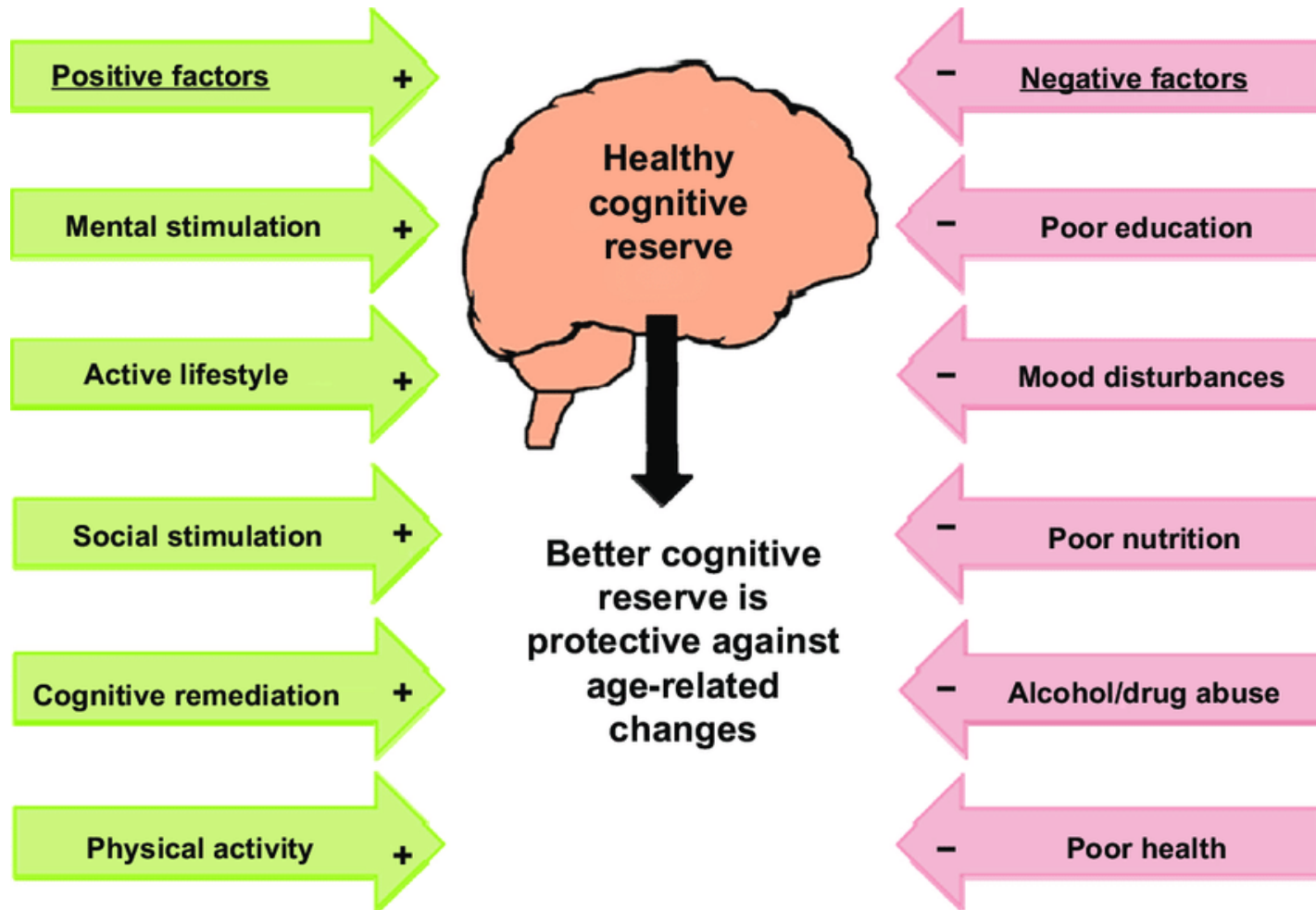


PRESS RELEASES

Intensive blood pressure control may slow age-related brain damage

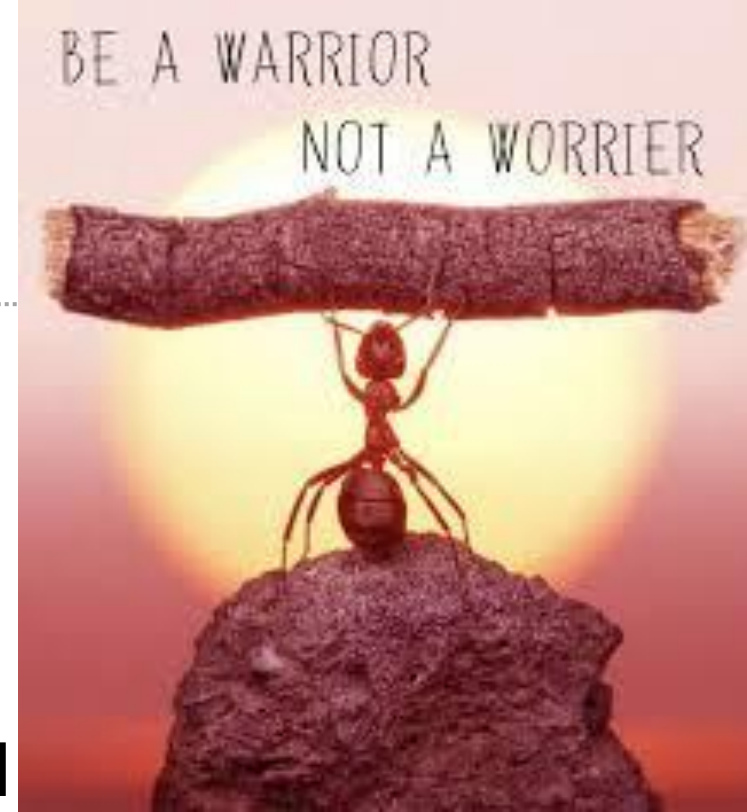
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A Strength and Resilience Approach



Strength and Resilience in Brain Health

- Focus on what we can control
- Recognize and work toward your strengths
- Prepare for the future
- Cultivate a positive frame of mind
- Find and use supportive strategies
- Never go it alone!



Resources!

We are here to help you connect to resources for any concerns you are experiencing, here are a few we recommend:

- **Aging and Disability Resource Center of Dane County**

- Information about resources and support for aging or living with a disability
- General contact: (608) 240-7401 or email ADRC@countyofdane.com

- **Alzheimer's & Dementia Alliance**

- Support and social groups for caregivers and people with memory changes
- Call (608) 232-3400 for more information

- **Independent Living, Inc.**

- Provide assistance with managing finances and other support for living independently
- Call (608) 274-7900 for more information

Connecting to resources can be really hard!

**We are here to help you navigate this
anytime, reach out to us at: (608) 800-2899,
brainhealth@nursing.wisc.edu**



Safe and Reputable Websites

We have also compiled a short list of websites that have proven to be safe and have a good reputation for giving quality information.

- National Institute on Aging:

<https://www.nia.nih.gov/health/caregiving>

- Alzheimer's Association:

<https://www.alz.org/>

- Family Caregiver Alliance

<https://www.caregiver.org/national-center-caregiving>



National Institute
on Aging

