

# Dementia 101

## Understanding Normal Memory Loss, Mild Cognitive Impairment, and Dementia

Susan Johnson, MS  
Dementia Care Specialist



# OBJECTIVES

- Differentiate between normal cognitive changes and what could be an indication of dementia
- Understand the continuum of cognitive changes associated with the development of dementia
- Learn the reasons for early detection of a dementia disease and the features of a complete diagnosis
- Apply knowledge of risk factors for dementia to personal lifestyle modifications you may choose

# What is dementia?

A condition that represents a cognitive decline from a previous level of functioning

A condition that has resulted in brain cell death affecting more than one area of cognition (thinking ability)

- memory
- attention
- reasoning
- organization
- language
- abstraction
- visual perception
- judgment

# Dementia is...

- NOT normal age-related memory loss
- NOT a normal outcome of aging



# Dementia

Symptoms vary depending on the type of dementia

Not everyone exhibits the same symptoms

There is currently no cure for dementia diseases, including Alzheimer's Disease

Progressive and degenerative



# DEMENTIA

Alzheimer's  
Disease

Lewy Body

Mixed  
Picture

Frontal  
Temporal

Vascular

Drug  
Related

Parkinsons  
Related

Alcohol  
Related

Genetic  
Condition

Others

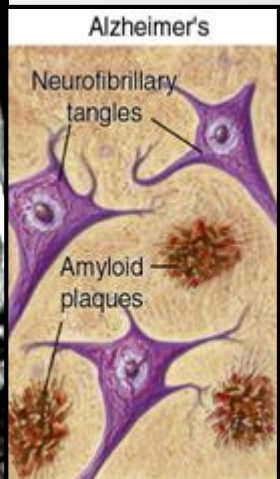
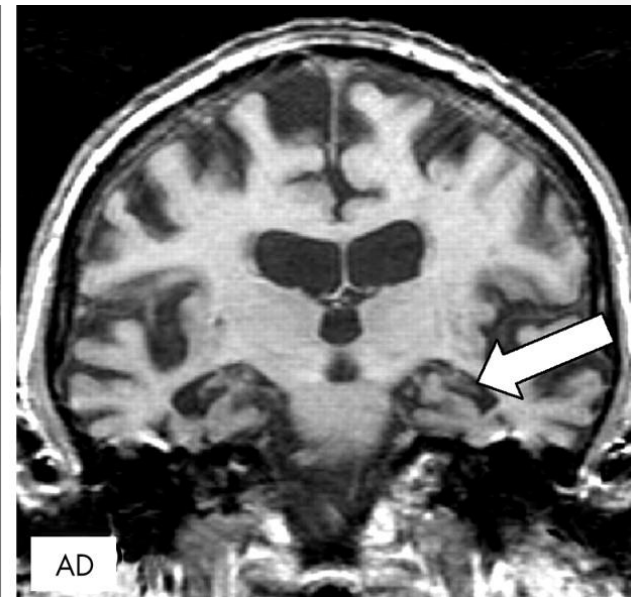
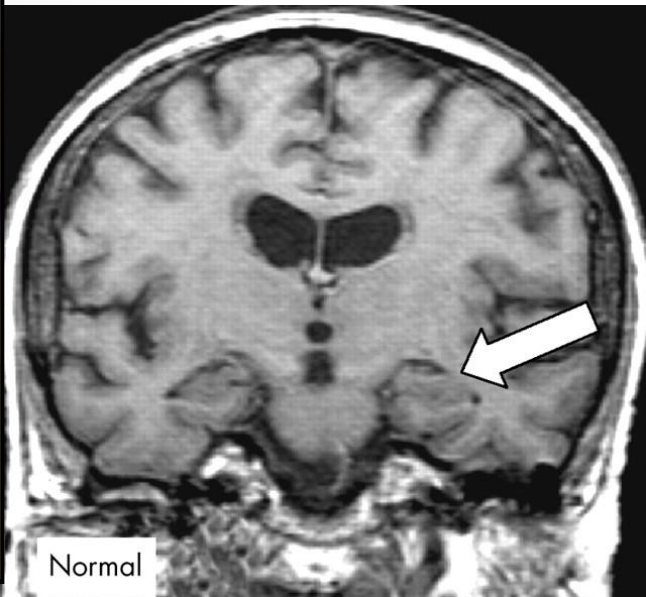
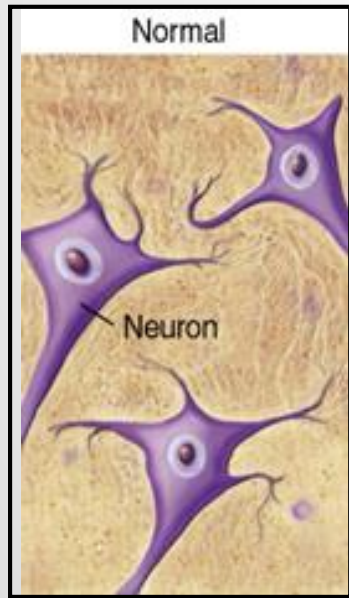
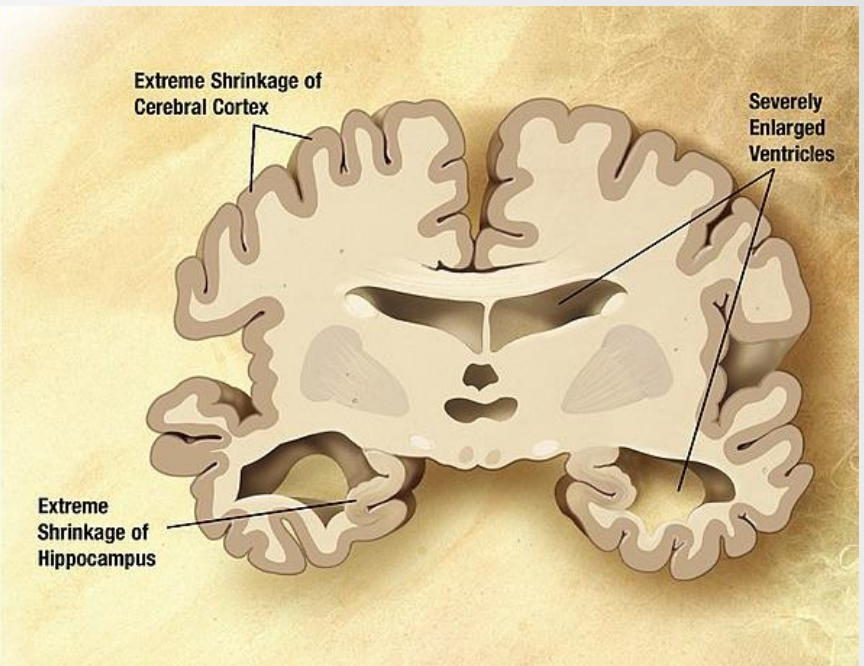
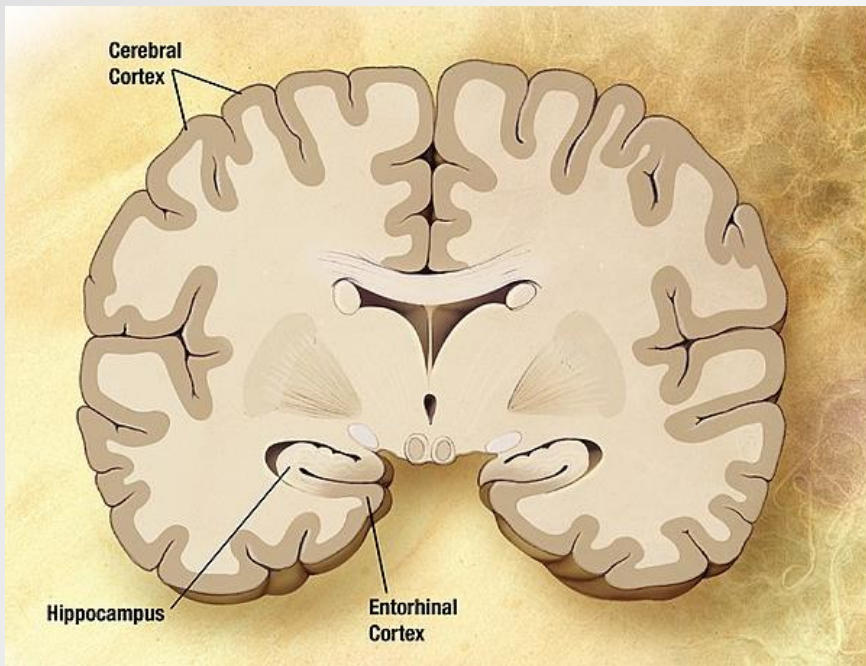
Mental  
Condition

MS Related

Disease  
Related

Infections







## Most common types of dementia

- **Vascular Dementia** – caused by a single large stroke (CVA), many small strokes (TIA), or micro-strokes that happen over time with cumulative effects
- **Dementia with Lewy bodies** – hallucinations are most common in this form of dementia; abilities fluctuate greatly





## Most common types of dementia

- **Frontotemporal Degeneration** – caused by various diseases that affect the frontal and temporal lobes of the brain
- **Mixed Dementias** – Alzheimer's and Vascular, Alzheimer's and Alcohol Related Dementia

# Alzheimer's Disease

## United States

- 2021: **6.5 million** (73% are age 75+)
- 2050: **12.7 million** (projected)
- **6<sup>th</sup>** leading cause of death
- **5<sup>th</sup>** leading cause in those 65+

## Kenosha County

- 2020 – **2,737**
- 2040 – **5,663** (projected)

# Dementia by the numbers

1 in 9 Americans 65 and older have Alzheimer's Disease or another dementia

1 in 3 seniors die from Alzheimer's Disease or another dementia

In 2020, COVID-19

- 20% increase in Alzheimer's and dementia deaths

Almost two thirds are women

# DEMENTIA FACTS

---

- **Older African Americans**
  - twice as likely to have Alzheimer's/other dementias
- **Hispanic Americans**
  - 1.5 times as likely to develop dementia as their white counterparts



## CAREGIVERS

Most people with Alzheimer's live in the community

- 80% live in their home
- 22% live independently and alone in a home

About 30% of caregivers are age 65+

Nearly  $\frac{1}{4}$  are in the “sandwich generation”



# Demographic Changes

- Childbearing is being delayed
- “Beanpole” families
- More women in the workforce
- Longevity: people are living longer with chronic conditions



# The Cost of Alzheimer's Disease

- In 2022, Alzheimer's and other dementias will cost the nation **\$321 billion**.
- By 2050, these costs could reach nearly \$1 trillion.



# We are all in this together...



Currently, the number of people with dementia in Wisconsin would fill both Miller Park *and* Lambeau Field - almost 125,000 citizens.

The single factor contributing to the likelihood of dementia is *age*.



**WISCONSIN  
STATE  
DEMENTIA  
PLAN**

## Four Priorities Based on Survey Results

- Care in the Community
- Health Care
- Facility-based Long-Term Care
- Crisis Response System

Will be implemented  
between 2019 and 2023





# DEMENTIA RATES



- **Western cultures**
  - medication management
  - reduced smoking
  - greater awareness of healthy lifestyle
- **Future of treatment for Alzheimer's disease**
  - Drugs
  - Modifiable risk factors

# Is this normal aging or something else?



## You may notice these changes.

- Losing track of commonly used items
- Why did I walk into this room?
- Forgetting the location of a well-known store
- Difficulty thinking of the exact word you need
- Forgetting the name of someone you just met
- Forgetting the name of a close family member or close friend

# Normal aging, or not?



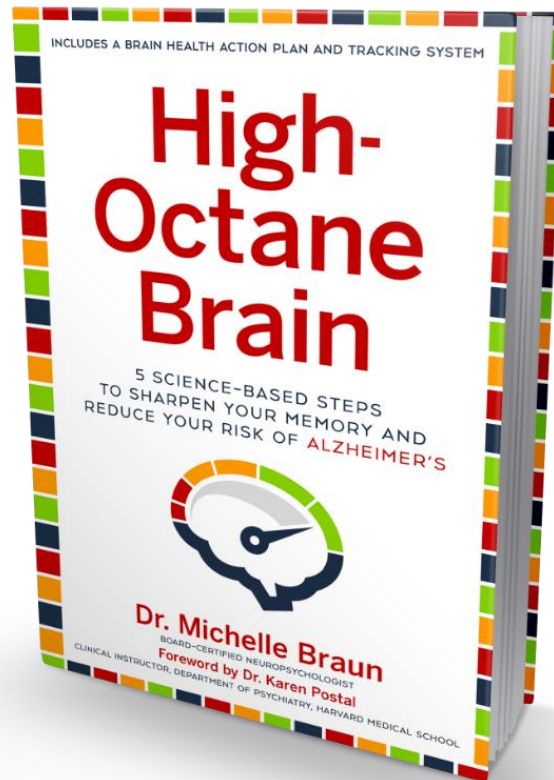
- Forgetting something you intended to buy at the store
- Forgetting how to do a favorite hobby
- Repeatedly forgetting the names of common objects
- Trouble remembering the name of a casual acquaintance or someone you haven't seen for years

Braun, M. (2020). *High Octane Brain*. Sterling Publishing Co., Inc.



# The High Octane Brain

Dr. Michelle Braun



# Get it checked out



- Forgetting the location of a well-known store
- Forgetting the names of a close family member or close friend
- Forgetting how to do a favorite hobby
- Repeatedly forgetting the names of common objects

Braun, M. (2020). *High Octane Brain*. Sterling Publishing Co., Inc.



# Three Warning Signs of a Potential Memory Problem

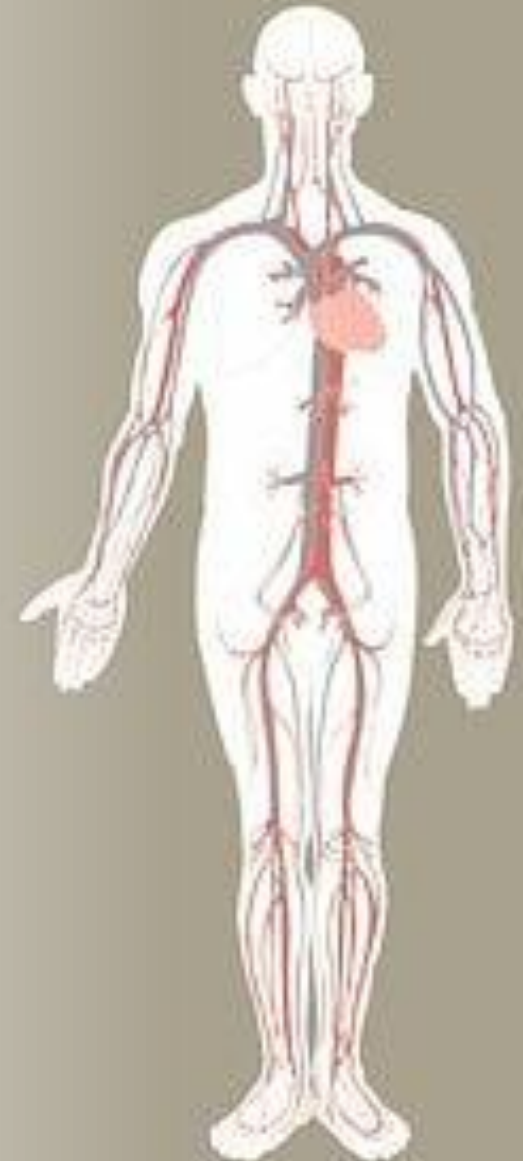
1. Current memory is notably weaker for well-known, frequently used information than before, as evidenced by increasing forgetfulness.
2. Increased or new forgetfulness that can't be explained.
3. Others have noticed that your memory is worsening.

Braun, M. (2020). *High Octane Brain*. Sterling Publishing Co., Inc.

# Importance of early dementia screening

---

- Reversible causes of memory loss and confusion can be identified and treated
- Screening can lead to medical diagnosis of dementia for early intervention:
  - Plan for the future (financial/healthcare)
  - Gives families time to learn about dementia supports and services
  - Planning helps avoid crisis situations



# Reversible or treatable memory loss

- Adverse medication interactions and side effects
- Untreated infections or other medical issues
  - UTI, uncontrolled diabetes or heart disease, dehydration
- Frequent lack of sleep and sleep disturbances
- Chronic pain
- Hypothyroidism
- High levels of stress
- Depression or anxiety
- Chronic alcohol use
- Vitamin deficiency or electrolyte imbalance

# Memory Screen Mondays



## Memory Screens:

- ∞ Provide relief for individuals concerned about normal memory loss
- ∞ Lead to diagnosis of treatable conditions
- ∞ Offer the ability to make lifestyle changes early when they have the greatest potential for positive effect and the opportunity to participate in making future decisions

*Screening results are not a diagnosis. Individuals who have concerns are encouraged to pursue a full medical exam.*

**8 a.m. - noon**

**Appointments recommended.**

**Call the ADRC: 262-605-6646.**

**ADRC**  
Kenosha County  
Aging & Disability Resource Center





# | The Diagnosis

# DIAGNOSIS

---

- Complete medical exam
- Neurology exam
- Neuropsychological testing
- Wisconsin Alzheimer's Institute affiliated clinics
- United Community Center Latino Geriatric Assessment Center Collaboration





# Defining Alzheimer's disease

- Gradual and progressive decline in cognitive function with impairments in recent memory and at least one other area of cognition
- Decline is not due to other medical or psychiatric illness
- A disease that ultimately results in total loss of independent functioning and death
- Typically classified as early, middle, and late stage

# THE BASICS

- Obtain a Diagnosis
- Prepare for the Future
- Educate Yourself
- Take Care of You
- Build Your Care Team
  - Create a Back-up Plan



# Cognitive Continuum

Asymptomatic      MCI due to Alzheimer's      Dementia



## Asymptomatic

- No cognitive symptoms
- Possible biological changes in the brain

## Mild Cognitive Impairment (MCI)

- Significant memory impairment (noticeable by family)
- Shows up in testing
- No impairment of daily functioning, but generally progressive

## Dementia

- Significant impairment of daily functioning plus progressive memory loss and/or impairment of other areas of cognition.

***MORE THAN  
NORMAL AGING:  
UNDERSTANDING  
MILD COGNITIVE  
IMPAIRMENT***

Alzheimer's Association Special Report

"Syndromic MCI"

- Of unknown cause or causes other than Alzheimer's disease

MCI due to Alzheimer's disease

- Biomarkers present

# Mild Cognitive Impairment

Affects  
approximately 12-  
18% of those age  
60 and older

10-15% go on to  
develop dementia  
each year

About 1/3 develop  
dementia due to  
Alzheimer's within  
5 years



# Alzheimer's disease Early-Stage

- Memory loss is the primary symptom
- Difficulty finding words and remembering names
- Repetitive words, thoughts, questions
- Becoming lost in familiar places
- Increased irritability and personality changes
- Difficulty completing familiar tasks

# Alzheimer's disease Middle- Stage

- Paranoid thinking and accusations
  - Passive/quiet vs easily frustrated/agitated
  - Misplacing or hiding items in odd places, hoarding, and rummaging
- Anxiety or depression
  - Sleep disturbances
  - Increased confusion

# Alzheimer's disease Late-Stage

- Pacing and wandering
- Sensory losses and hallucinations
- Changes in physical abilities, including walking, sitting and eventually, swallowing
- Increasing difficulty communicating
- Vulnerable to infections, especially pneumonia

**A drug that  
may change  
disease  
progression**

## **Aducanumab (Aduhelm)**

- anti-amyloid antibody  
intravenous (IV) infusion  
therapy approved for Alzheimer's  
disease
- Only for MCI or early stage  
Alzheimer's

## **Common side effects**

- ARIA (amyloid-related imaging  
abnormalities)
- Headache, fall risk
- Allergic reaction

# Drugs that treat symptoms

## Cholinesterase inhibitors

- Aricept
- Exelon
- Razadyne

## Glutamate regulators (Namenda)

- Memantine (Namenda)

## Namzaric



# Dementia Risk Factors

## Non-modifiable

- Age
- Genetics (ApoE4)
- Gender (women more at risk)

## Vascular (modifiable)

- Smoking
- Hypertension
- Diabetes
- High cholesterol
- Metabolic syndrome

Livingston, et al. The Lancet, 2017, as cited by Gitelman, Reducing the Risk of Alzheimer's: Separating Fact from Fiction, webinar, 2018

## Lifestyle (modifiable)

- Hearing loss
- Low education/cognitive reserve
- Depression
- Physical inactivity
- Social isolation
- Obesity
- Poor diet
- Sleep disorders
- Stress
- Head injury

# Common Conditions that Affect Brain Health

- Heart disease,  
high blood  
pressure
- Diabetes
- Stroke
- Traumatic  
brain injury
- Depression
- Sleep  
problems



# Heart/Brain Connection



- **SPRINT MIND Study**
  - Large-scale, long-term clinical trial
  - Can treating to the lower blood pressure target reduce the risk of developing dementia and/or MCI?
  - Can it reduce the total volume of white matter lesions in the brain?

# SPRINT

- **More intensive blood pressure control**
  - Systolic blood pressure of less than 120 mm Hg
  - Reduced risk of cardiovascular morbidity and mortality
  - 2017 American Heart Association and American College of Cardiology high blood pressure clinical guidelines
    - Five categories (normal = less than 120/80)
  - 46% of population - high blood pressure

# The good news



## There are things you can do:

- Manage your chronic health conditions
- Eat well to control high blood pressure, cholesterol, blood sugar
- Exercise
- Sleep well
- Be engaged both cognitively and socially



# What about a combined approach?

- Physical Activity
- Cognitive Activities
- Not smoking
- A high-quality diet
- Light to moderate alcohol consumption

“...compared to participants with no or one healthy lifestyle factor, the risk of Alzheimer’s was 37% lower in those with two to three and 60% lower in those with four to five health lifestyle factors.” – NIH

Dr. Dhana – lead author

# U.S. POINTER STUDY

- U. S. Study to Protect Brain Health Through Lifestyle Intervention to Reduce Risk
  - Two-year clinical trial
    - Funded by Alzheimer's Association
    - Lifestyle interventions
      - Physical exercise
      - Nutritional counseling and modification
      - Cognitive and social stimulation
      - Improved self-management of health status

# Focus on Nutrition



- **DASH, Mediterranean, MIND Diet**
- Fruits and vegetables
- Whole grains
- Lean meats, fish, poultry
- Low-fat or non-fat dairy products
- Less solid fat, sugar and salt
- Proper portion sizes
- Adequate fluids

**Look into healthy meal programs, like those provided by your Aging and Disability Resource Center.**

# MIND DIET

- **Leafy green vegetables**, at least 6 servings/week
- Other vegetables, at least 1 serving/day
- **Berries**, at least 2 servings/week
- Whole grains, at least 3 servings/day
- Fish, 1 serving/week
- One glass of wine per day

# What Can You Do Today?



- Pick one thing you can do that may help your brain
- Think of small, first steps such as:
  - Taking a 10-minute walk a few times a week
  - Adding one serving of vegetables each day
  - Making an appointment for health screenings or a physical exam



# Community Resources

- **Kenosha County Aging and Disability Resource Center**
  - Information and assistance
  - Loan closet
  - Benefits Specialists
  - Caregiver grants
  - Health Care Power of Attorney
  - Transportation
    - Mobility Manager

# Dementia Assistance

## Dementia Care Specialist – Susan Johnson

- One-on-one consultations
- Family meetings
- Educational classes and programs
- Music and Memory; DICE

## Contact Information

- Phone: (262) 605-6602
- [susan.johnson@kenoshacounty.org](mailto:susan.johnson@kenoshacounty.org)

# Credits

- Wisconsin Alzheimer's Institute – University of Wisconsin School of Medicine and Public Health
- Froedtert & Medical College of Wisconsin – Memory Clinic and Research Center
- Alzheimer's Association
- Wisconsin Department of Health Services Dementia Capable Wisconsin
- U.S. Department of Health and Human Services:  
National Institutes of Health; National Institute on Aging
- Family Caregiver Alliance – National Center on Caregiving