



Non-Medication Approaches to Ensuring Better Brain Health

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Chair of Education

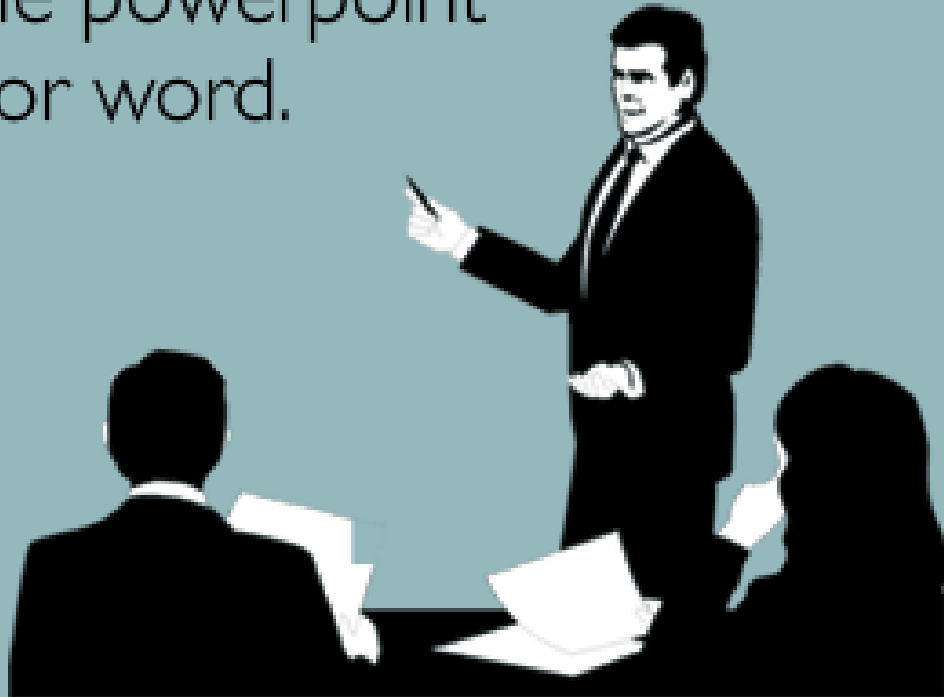
Retired

Mayo Clinic Health System – Eau Claire

Outline

- Dementia, definition
- Medications, current and imminent
- Non-medication interventions
- Question and (hopefully) Answers

For my presentation today, I'll
be reading the powerpoint
slides word for word.



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DEFINITIONS, SYMPTOMS, AND RISK FACTORS

Spectrum of Memory Loss

- Normal Aging
- Mild Cognitive Impairment
- Dementia
 - Alzheimer's Disease
 - Vascular Dementia
 - Lewy Body Dementia
 - Frontotemporal Dementia
 - Others

What's the difference between **ALZHEIMER'S** and **DEMENTIA**?



Dementia is an umbrella term that describes a wide range of symptoms including memory loss and mental decline. Alzheimer's is the most common form of dementia, but there are many others. **Learn more at alz.org/relateddementias**

Dementia Disorder

- “Dementia” is a term used to suggest that a person has developed difficulties with memory, reasoning, and judgment.
- Dementia Disorder is characterized by impairment of memory and at least one other cognitive area:
 - Speaking or writing coherently (or comprehension)
 - Executive Function
 - Attention
 - Visual-spatial abilities
- Changes must be severe enough to interfere with a person’s independence and daily activities.

Treatment/Management of Dementia- Standard

Medications:

- Acetylcholinesterase inhibitors
 - Tacrine – not used, hepato-toxicity
 - Aricept (donepezil) – most popular, once daily dosing
 - Exelon/Exelon patch (rivastigmine) – also used for Parkinson's dementia
 - Reminyl/Razadyne (galantamine) – mild to moderate dementia
- N-methyl-D-aspartate receptor antagonist
 - Namenda (memantine) – used for moderate to severe dementia

Medications - Emerging

- Aducanemab (Aduhelm)
 - Lecanemab (Leqembi)
 - Donanemab
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- All clear amyloid plaque from brain
 - Significant side effects including brain bleeding
 - Very expensive!! And extensive testing/monitoring required

Strategies for Brain health

- Exercise
- Healthy Diet
- Adequate Sleep
- Stay Socially Active
- Keep Mentally Engaged
- Mind your General Health Status

Exercise

- Exercising 3 or more times a week associated with 40-50% lower risk of dementia diagnosis
- 30 minutes of moderate activity
- Increases blood flow, BDNF (Brain Derived Neurotrophic Factor) and reduces atrophy
- Consistency is important
- Heath Clubs and YMCA?

Diet

- MIND Diet (Mediterranean diet Intervention for Neurodegenerative Delay)
- Mediterranean Diet – fish, green leafy vegetables, nuts, berries and poultry (avoid red meat, butter cheese and sweets)
- Shown to reduce chances of cognitive decline by 30-35%
- Avoid alcohol

Sleep

- Sleep is profoundly important for brain health
- Helps memory consolidation
- Important for clearance of toxins and waste products
- 7-8 hours of uninterrupted sleep is ideal for most adults

Sleep Disorders

- Obstructive Sleep Apnea (OSA) – recurrent episodes of breathing stoppages during sleep with drop in oxygen and sleep disruption (often occult)
- Restless Legs Syndrome/Periodic Limb Movement Disorder
- REM Sleep Behavior Disorder (dream reenactments during sleep)

Social Connection

- Older adults who were more socially engaged have higher cognitive function
- Social isolation associated with 50% increased risk of dementia
- Married vs Single
- Social Media?

Stay Mentally Active

- Education level associated with preserved memory
- Cognitive activity delays the onset of memory loss
- Wide variety of options (card games, board games, word games, Sudoku)

General Health

- Regular check ups to monitor general health
- Blood pressure
- Weight
- Diabetes
- B12 deficiency, Thyroid, Lyme Disease
- All cardiac risk factors

Other Interventions

- Multivitamins – recent report of decreased dementia risk with use of daily multivitamin; controversial
- Supplements (Prevagen, others)
- No evidence of benefit in peer reviewed studies
- No oversight from FDA
- Prevents people from doing the things that do work

Recap: To Decrease Risk of Cognitive Decline

- Exercise regularly
- Eat a healthy diet (MIND)
- Sleep well
- Stay engaged
- Activate your brain
- Stay healthy
- Avoid gimmicks

- Questions?

- Thank You!