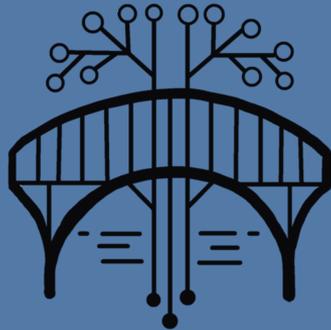
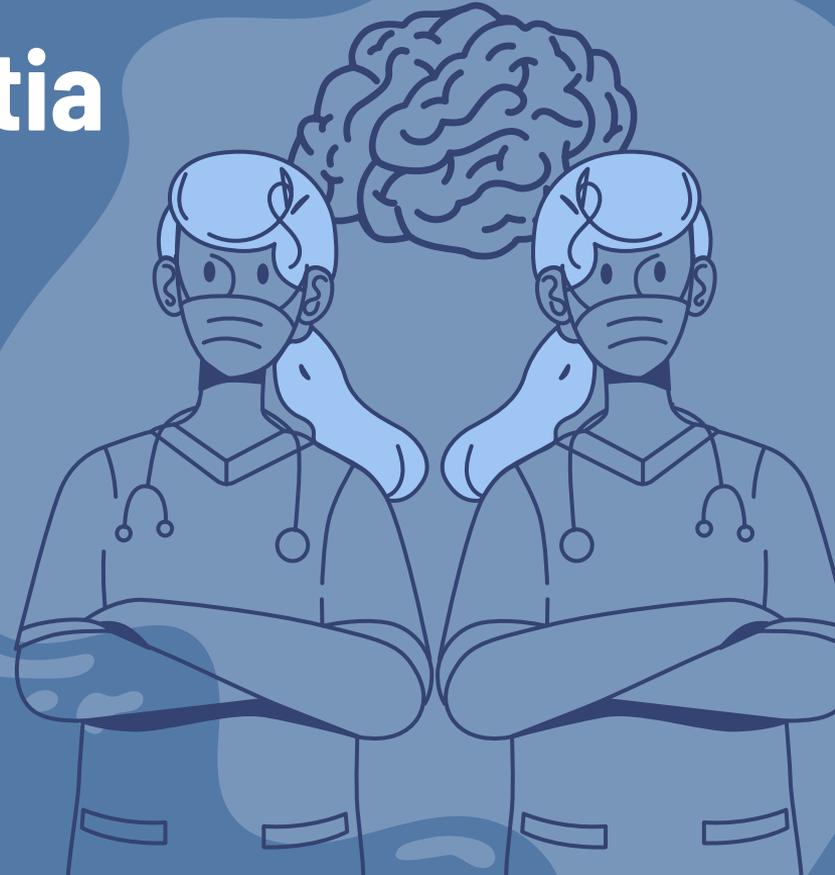


Brain Health & Dementia Awareness Workshop



NeuroBridge



Presentation Outline

1. Trivia
2. What is Alzheimer's Disease?
3. Risk Factors
4. Diagnosis and Treatment
5. What can we do about it?
6. Trivia (again!)
7. Q&A



Pre-Trivia

True or false:

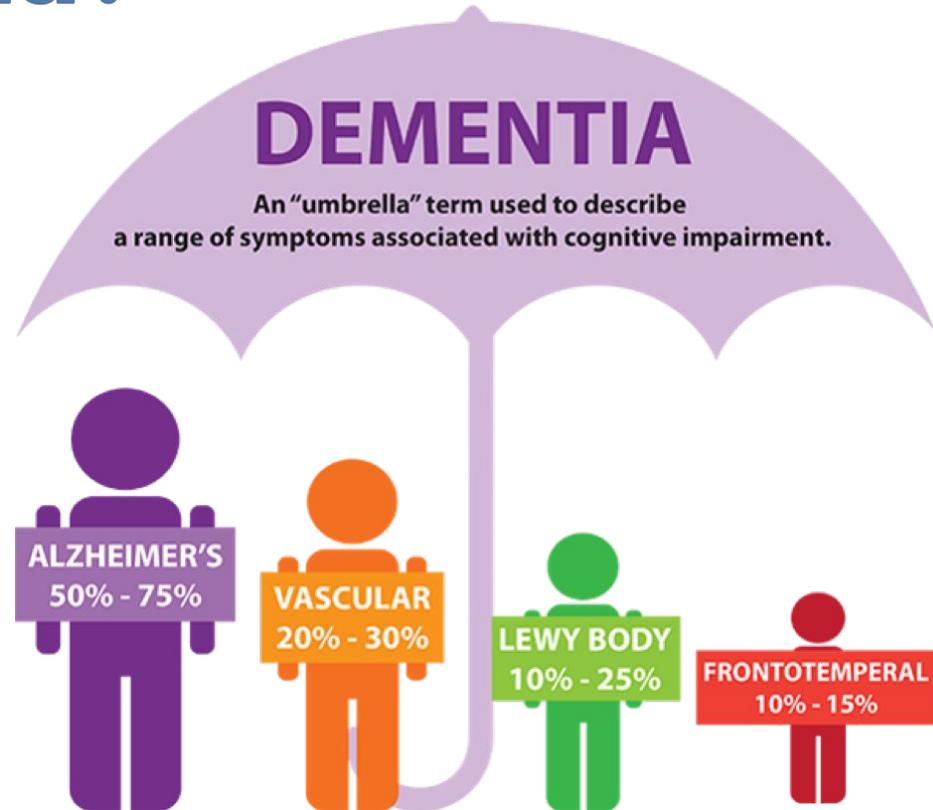
1. Alzheimer's (or any form of dementia) is a normal part of aging
2. People with Alzheimer's typically lose *recent* memories before *older* memories.
3. Social isolation can increase risk of cognitive decline in Alzheimer's
4. If someone in my family has Alzheimer's disease/dementia I'm going to get it



What is Dementia?

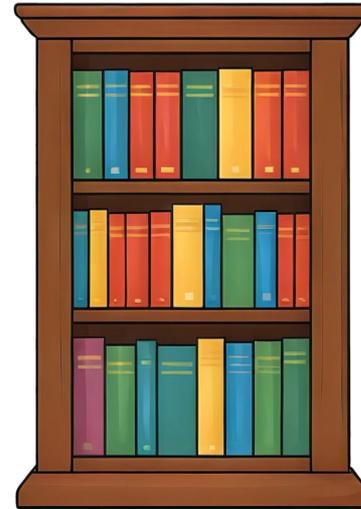
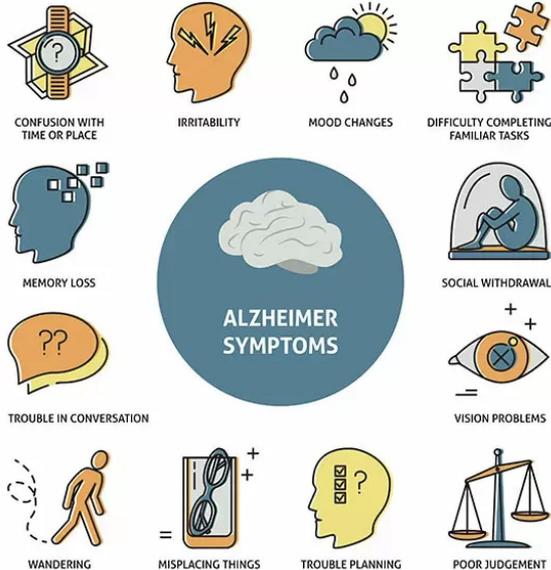
What is Dementia?

- Not a specific disease
- “Umbrella” term for the loss of memory, thinking, and reasoning skills that interferes with daily life
- Alzheimer's is the most common cause (60-80%)
- Vascular dementia is the 2nd most common cause



What is Alzheimer's?

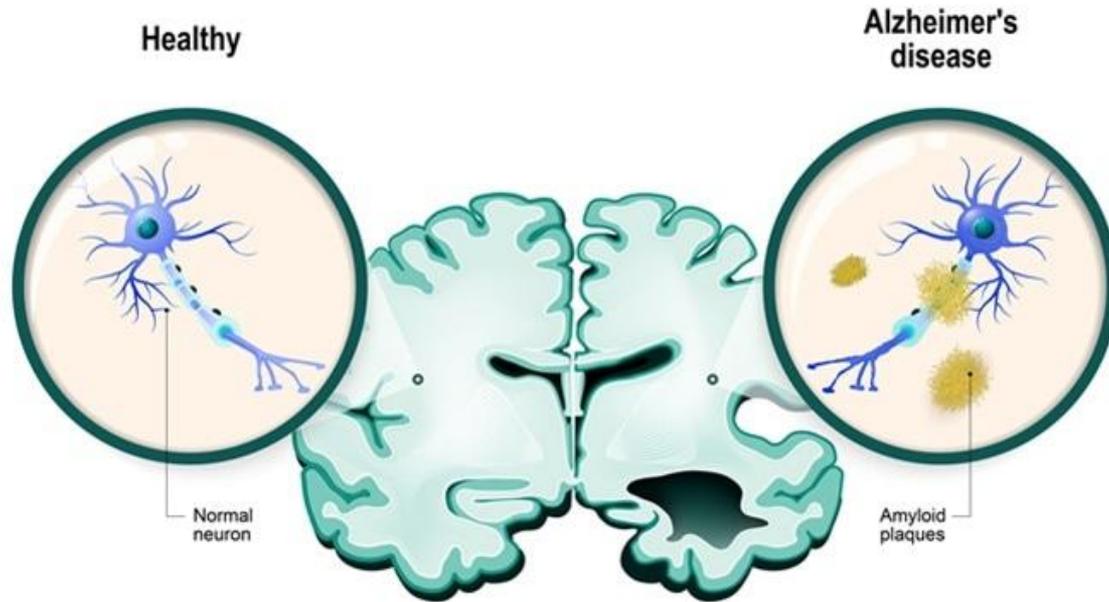
Alzheimer's is a chronic, neurodegenerative disease that destroys brain cells, causing thinking ability and memory to decline over time.



What Causes Alzheimer's?

Using our analogy → Books = Neurons, Rain = Amyloid & Tau Proteins

673 x 364



Common misconceptions



“Memory loss means you have Alzheimer’s”

“Alzheimer’s is just normal aging”

“Nothing can be done for someone with Alzheimer’s”



MCI vs. AD

Mild Cognitive Impairment (MCI)	Alzheimer's disease (AD)
Does not interfere with daily life	Affects daily functioning
Preservation of ADLs (finances, driving, grocery shopping)	Impaired ADLs (dressing, preparing meals, walking, eating)
Can be stable	Worsens over time
<i>Example: 72 year old retired physicist who gets lost while taking transit. She lives in a condo on her own.</i>	<i>Example: 50 year old veterinarian who was forced to retire due to forgetting drug doses.</i>

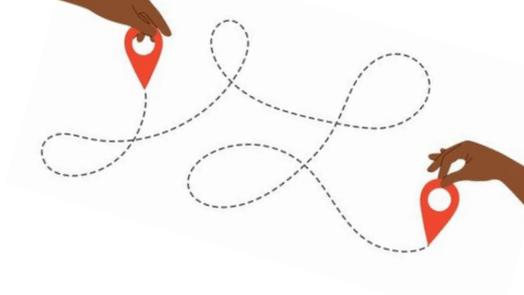


Symptoms of Alzheimer's

Symptoms

Symptoms may start mild and can worsen over time. This is different than normal aging - it is helpful to discuss changes with family doctor!

- **Memory loss** - Ex. initially difficulty recalling *new* information
- **Lowered attention** - Ex. difficulty multitasking, misplacing things
- **Impaired judgement / decision-making** - Ex. difficulty managing finances
- **Language issues** - Ex. difficulty remembering names or finding words
- **Spatial memory issues** - Ex. difficulty finding your way in familiar places
- **Behavioural or psychological symptoms** - Ex. depression, anxiety, agitation





Diagnosis

Diagnosis

Visit to family physician

Cognitive testing

Referral to specialist

Post-diagnosis support

History and physical exam

Neurological exam

Montreal Cognitive Assessment (MoCA)

or

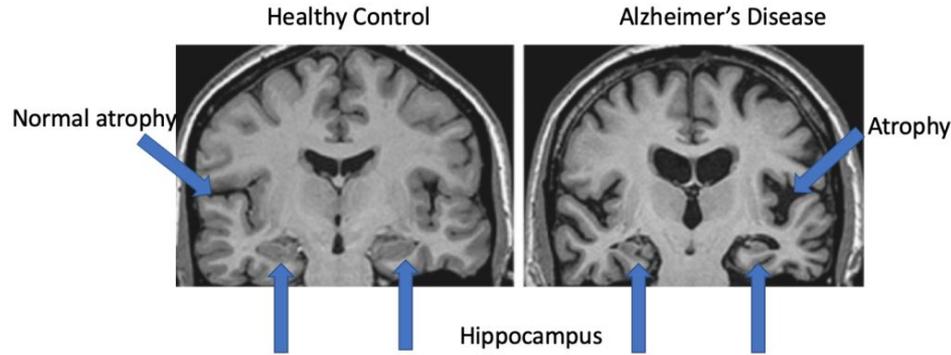
Mini Mental State Examination (MMSE)

Bloodwork

MRI +/- CT

Discuss treatment options, support services, and strategies to manage symptoms

Diagnosis



Montreal cognitive assessment								
Name:	Sex:	Age:	Room:	Date:				
Visuospatial/executive	Copy cube			Draw clock (Ten past eleven)(3 points)	Points	___/5		
						[] [] [] [] [] [] [] [] [] []		
Contournumbers hands								
Naming					Points		___/3	
		[] [] [] [] [] [] [] [] [] []						
Memory Read list of words, subject must repeat them. Do 2 trials. Do a recall after 5 minutes.		FACT	VELVET	CHURCH	DAISY	RED	No points	
	1sttrial							
	2sttrial							
Attention		Subject has to repeat them in the forward order [] 21854					___/2	
		Read list of digits(1 digit/sec.). Subject has to repeat them in the backward order [] 742						
		Read list of letters, the subject must tap with his hand at each number 1. No points if ≥ 2errors.					___/1	
		[] 52139411806215194511141905112						
		Serial 7 subtraction starting at 100. [] 93 [] 86 [] 79 [] 72 [] 65					___/3	
		4 or 5 correct subtractions: 3pts, 2or 3 correct: 2pts, 1correct:1pt, 0correct: 0pt						
Language		Repeat: I only know that John is the one to help today.[]					___/2	
		The cat always hid under the couch when dogs were in the room.[]						
Fluency/Name maximum number of words in one minute about animals.[]_(N ≥ 11 words)							___/1	
Abstraction		Similarity between e.g. banana-orange=fruit [] train-bicycle [] watch-ruler					___/2	
Delayed recall	Has to recall words	FACT	VELVET	CHURCH	DAISY	RED	Points for uncode recall only	
	With no cue	[]	[]	[]	[]	[]		
Optional	Category cue							
	Multiple choice cue							
Orientation []Date [] Month []Year [] Day []Place [] City							___/6	
Total ___/30								



Risk Factors

Risk Factors

Non-modifiable (things you cannot change)

- Age (65+)
- Family history
 - Those with parent(s) and/or sibling(s) with AD
- Genetics
 - APOE4 gene variant



Risk Factors

Modifiable (things you can change, to some degree)

- High blood pressure
- Diabetes
- High cholesterol
- Physical inactivity
- Hearing loss
- Depression
- Social isolation
- Smoking & alcohol
- Air pollution





True or False?

**“There are things I can do to
keep my brain healthy”**



Risk Reduction & Management

Lifestyle Changes – Risk Reduction and Management

1. Exercise

- Even simple activities (walking, yoga, etc.) are beneficial - do what you can!

2. Social Engagement

- Staying connected with friends and family helps with emotional well-being
- Engage in your communities including social, religious and volunteer activities



Lifestyle Changes – Risk Reduction and Management

3. Mediterranean or DASH Diet

- Leafy greens, fruits, vegetables, fish, nuts
- Eat a rainbow!

What are your favourite fruits or vegetables?



4. Reduce stress

- Do activities that you enjoy!

What helps you relax?

5. Get enough sleep

- Aim for 7-9 hours per night



Lifestyle Changes – Risk Reduction and Management

6. Be heart healthy (vascular risk factors)

- Blood pressure, cholesterol, body weight, blood sugar
- See your doctor regularly

7. Reduce alcohol and smoking

- Any amount of reduction is beneficial
- Ask your doctor about aids to help quit!



Management - Pharmacological

1. **Some medications are available to help manage symptoms, but they do not cure Alzheimer's (i.e., they are not disease-modifying)**

- **Examples:**

- Cholinesterase inhibitors (e.g., donepezil)
- NMDA-antagonist (e.g., memantine)
- Combination therapy

- Can temporarily improve or stabilize cognitive symptoms, like memory, attention, thinking, and language

2. **Clinical trials (disease modifying therapy)**

- Things may look very different a few years from now!





What can we do about Alzheimer's Disease?

What can we do?

1. Know the difference between dementia and normal aging

2. Make healthy lifestyle changes (previous slides)

- Increase physical activity
- Healthy diet
- Get good sleep
- Make social connections!!!
- Manage cardiovascular risk factors (diabetes, high blood pressure, cholesterol)
- Avoid smoking and limit alcohol intake

3. Visit your family doctor if you have any concerns



Post-Trivia



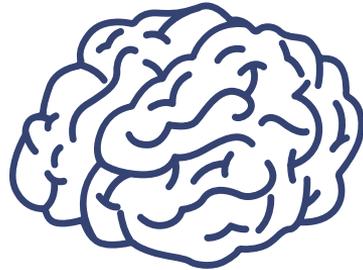
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Congrats!

*What brain healthy tips did you
enjoy hearing about today?*



**Thank you for
participating!
Any questions or
feedback for us?**

