

AGING WITH
INSIGHT:

Harnessing Knowledge
for Healthy Aging

Cognitive Health & Aging

Dr. Amanda Chen, MD FRCPC
Geriatrician, St. Joseph's Health Centre

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Thank you

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JOSEPH'S
HEALTH CENTRE FOUNDATION

AGING WITH
INSIGHT:

Harnessing Knowledge
for Healthy Aging

THE
SLAUGHT

FAMILY FOUNDATION

St. Joe's Updates

Our Emergency Department transformation is now complete!

40% more space.

100% donor-funded.



Cognitive Health & Aging


Presented by:

Dr. Amanda Chen, MD FRCPC

Geriatrician
St. Joseph's Health Centre



Agenda & Objectives

1. The aging process
2. What is normal in aging?
3.  flags to look out for and when to seek medical attention
4. Defining mild cognitive impairment and major neurocognitive disorders (dementia)
5. Prevention strategies
6. Future planning
7. Questions?

Aging

- Aging is a dynamic process impacted by biological, physiological, environmental, psychological, behavioral, and social factors.
- This process can be slowed by taking steps that support healthy aging and reduce the risk of chronic disease burden.

Cognitive Changes with Aging

↓	Preserved
Processing speed	Delayed, visual memory
Reaction time	Language skills and vocabulary
Divided attention	Knowledge base
Speed of performance on structured tasks	Ability to learn new information
Short term memory (mild)	Procedural memory



Frontal lobe

Organizational skills,
Problem solving,
planning

Temporal lobe
Storing and retrieving
memories, language
skills

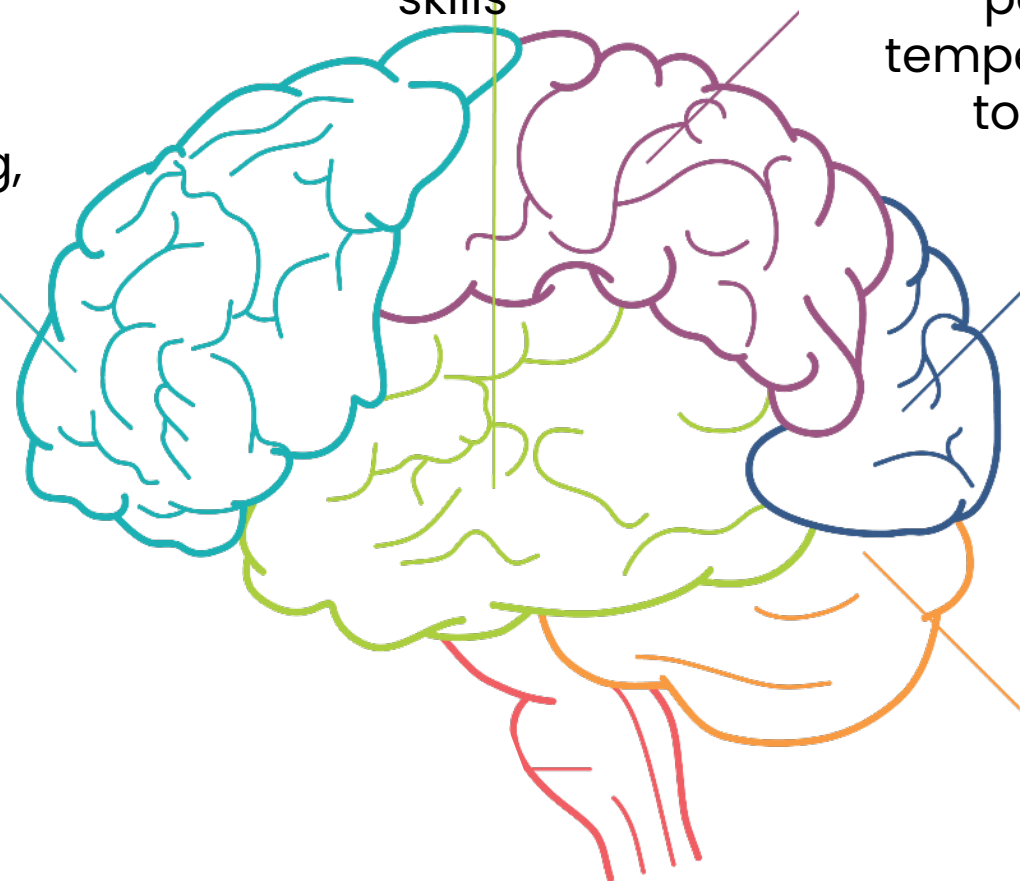
Parietal lobe
Sensory
processing of
pain,
temperature,
touch

Occipital lobe
Visual
perception

Cerebellum
Coordination of
movement and balance

Front

Back



When to seek medical attention?

- Step #1: Book an appointment with your Family Physician or walk-in clinic
- Step #2: Review of medical history, cognitive testing, physical examination
- Step #3: Bloodwork +/- neuroimaging +/- other procedures
- Step #4: Potential referral to Neurology, Geriatrics, or Psychiatry Specialists

Along the Disease Spectrum

Subjective
cognitive
impairment

Mild cognitive
impairment

Mild dementia

Moderate
dementia

Severe
dementia



Subjective Cognitive Impairment

Subjective
cognitive
impairment

Mild cognitive
impairment

Mild dementia

Moderate
dementia

Severe
dementia

Self reported
cognitive
decline with
no objective
findings

Mild Cognitive Impairment

Subjective
cognitive
impairment

Mild cognitive
impairment

Mild dementia

Moderate
dementia

Severe
dementia

Self reported
cognitive
decline **AND**
objective
findings with
preserved
function

Mild Dementia

Subjective
cognitive
impairment

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Moderate
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Self reported
cognitive
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functional
decline

Moderate Dementia

Subjective
cognitive
impairment

Mild cognitive
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Mild dementia

Moderate
dementia

Severe
dementia

IADL = instrumental
activities of daily living
i.e. transportation,
cleaning, meal prep,
finances

ADL = activities of daily
living
i.e. grooming, bathing,
toileting, dressing

Decline in
most IADLs
and some
ADLs

Severe Dementia

Subjective
cognitive
impairment

Mild cognitive
impairment

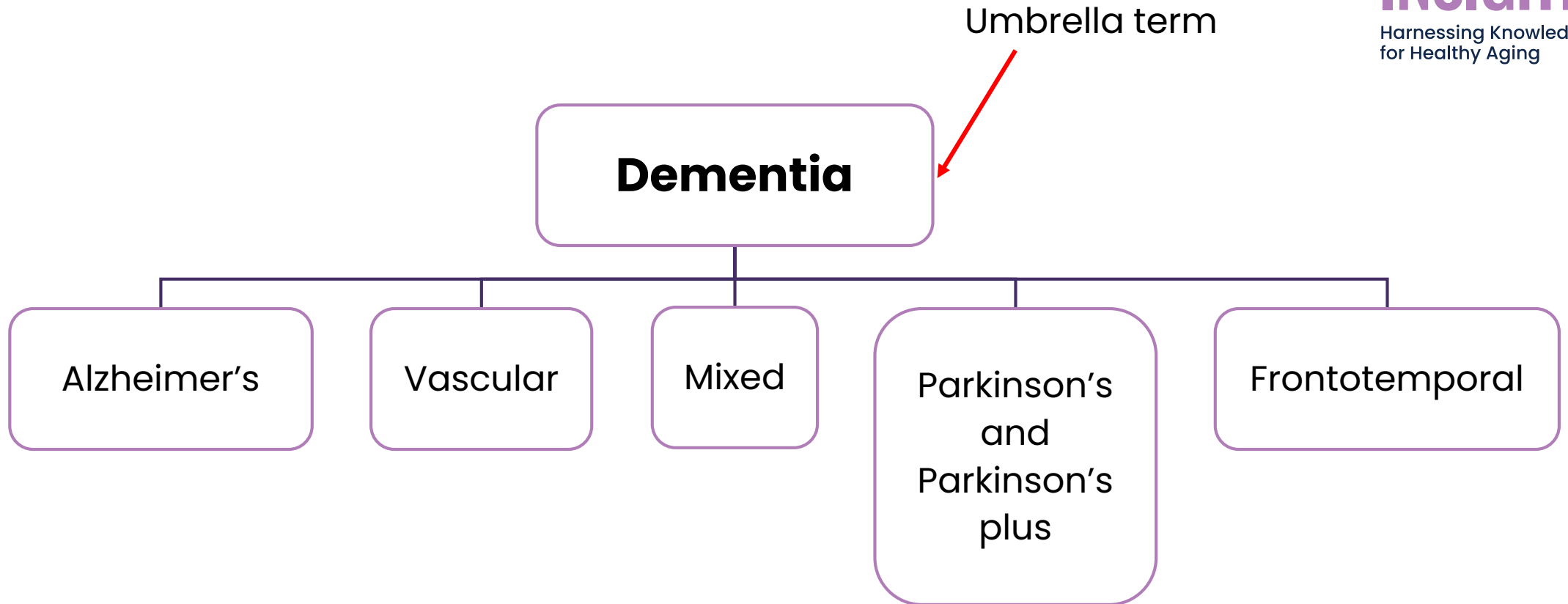
Mild dementia

Moderate
dementia

Severe
dementia

Decline in
most IADL
and ADLs

Types of Dementia



Alzheimer's Dementia

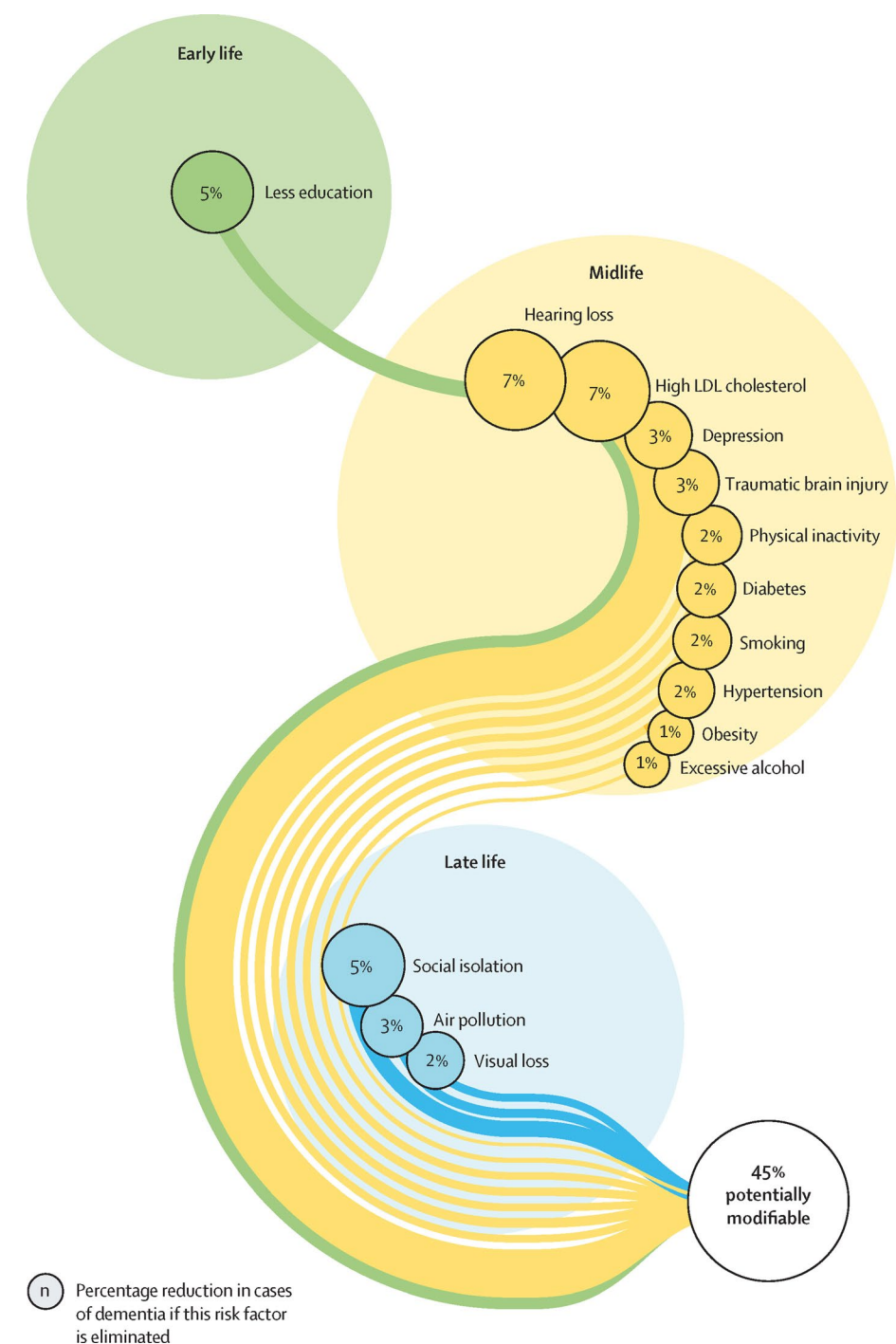
- Most common type of dementia, accounting for 60 to 80% of all dementias
- Chronic neurodegenerative disease that gradually results in decline and short-term memory loss (predominant symptom)

Vascular Dementia

- Vascular disease is the second most common cause of dementia
- Risk factors for vascular dementia also overlap with risk factors for stroke and heart disease such as high blood pressure, high cholesterol, and diabetes

How Can We Prevent This?

- 45% of risk factors for dementia are preventable!
- Risk factors (percent of dementia cases attributable):
 - Hearing loss (7%)
 - High LDL cholesterol (7%)
 - Less education (5%)
 - Social isolation (5%)



(Livingston et al, 2024)

Prevention Strategies

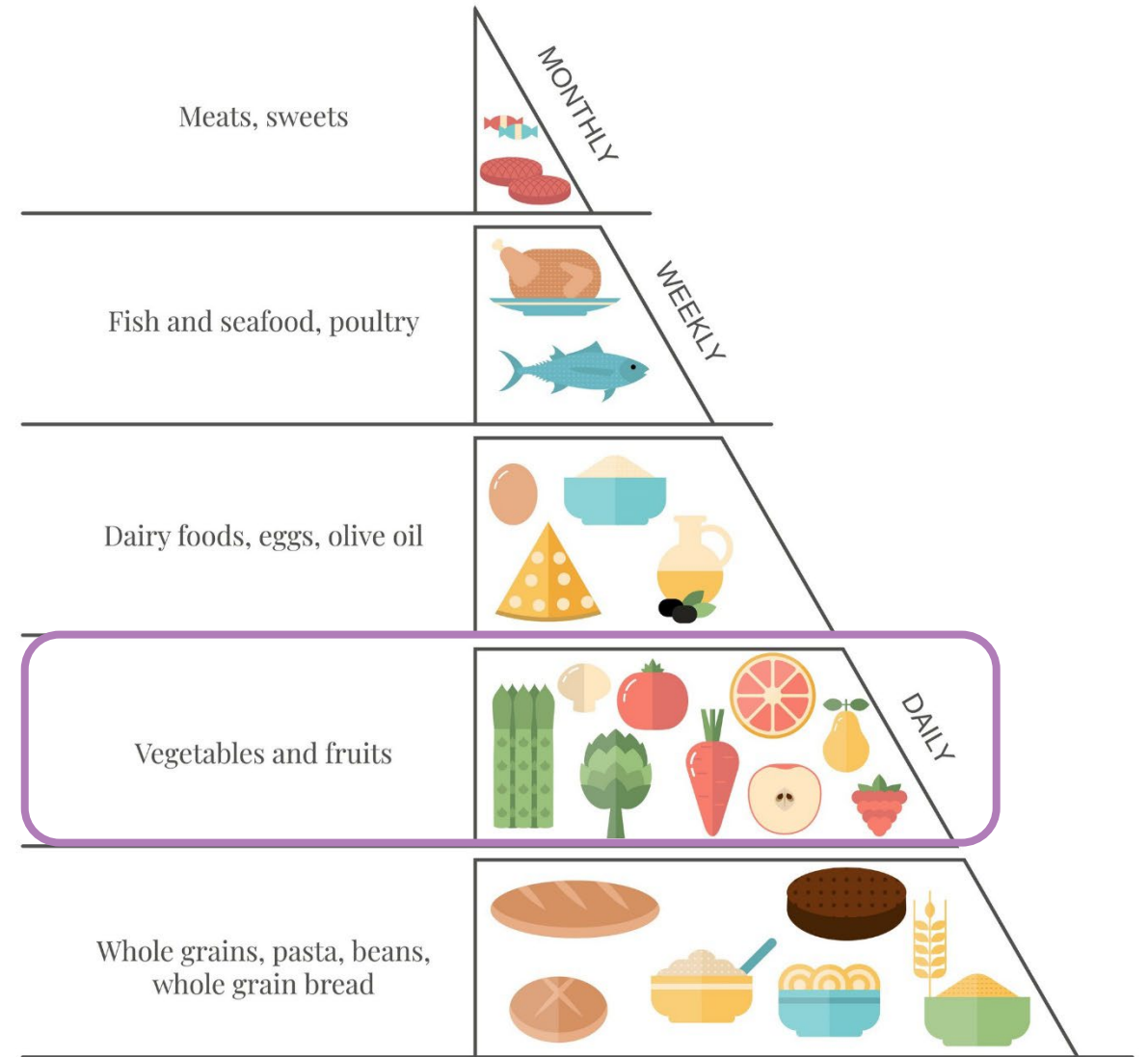
Exercise

- Recommend at least moderate intensity physical activity interventions which include
 - Aerobic exercise
 - Resistance training
 - Mind-body exercise (Tai Chi, Qigong)

Prevention Strategies

Diet

- Mediterranean diet



(Ismail et al, 2020)

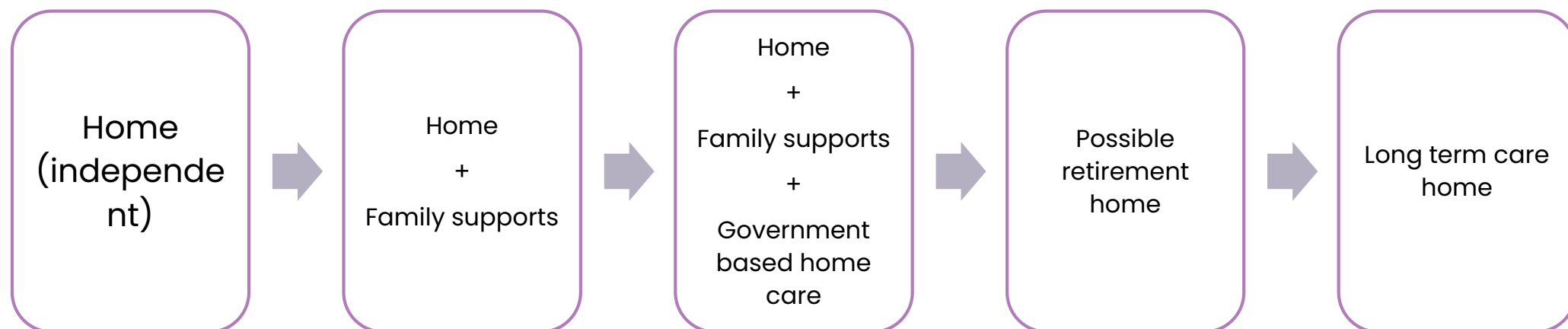


Prevention Strategies

Cognitive training/social engagement

- Engaging in cognitive stimulating activities, such as volunteering, and life-long learning

Future planning and supports



- Planning for power of attorney for personal care and property

Resources

Alzheimer's society: <https://alzheimer.ca/en>

Health education resources (Mount Sinai):
<https://sinaigeriatrics.ca/healtheducation/>



Questions?



Thank you for joining us!

Next session:

In April (date TBD)

Visit supportstjoes.ca/agingwithinsight
to learn more!

Get in Touch!

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