

Aging and the Brain ...

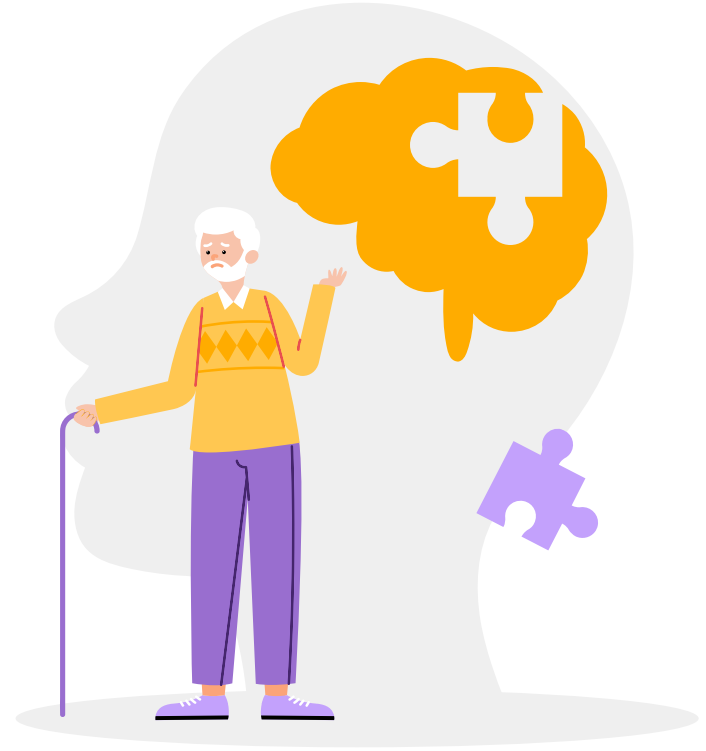
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Goals

Educate
Reduce worry
Increase confidence



Hurdles

Heterogeneity

Ageism

Anxiety

Pandemic Aftermath

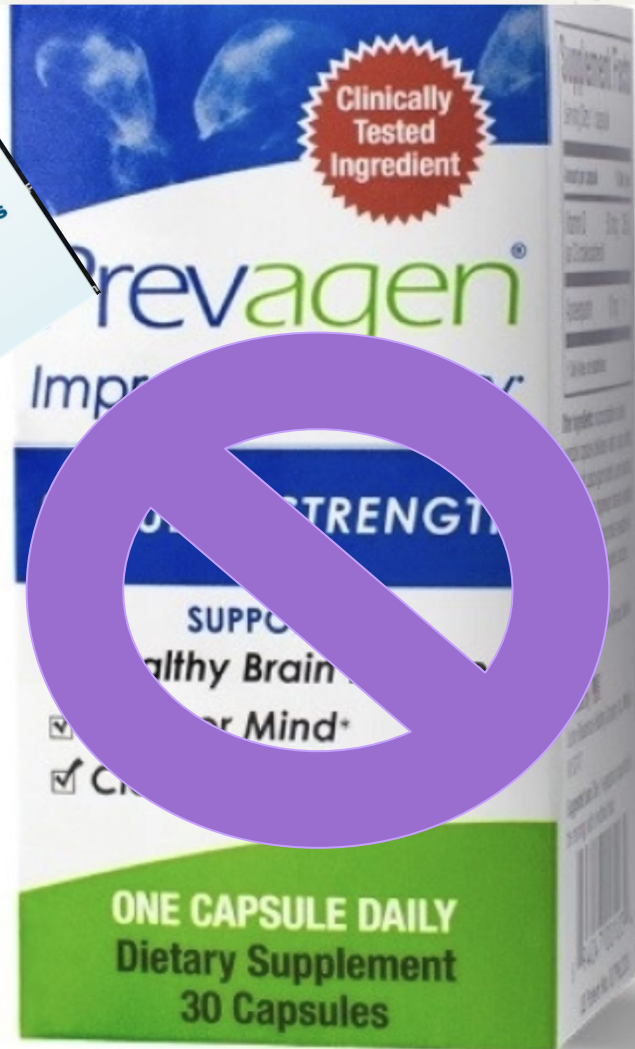
Misinformation



False claims

Attorney General James Wins Trial Against Quincy Bioscience for Deceptive and Fraudulent Advertising of "Memory Improvement" Supplement Prevagen

Court Accepts Jury Finding that Quincy Violated New York's 63(12) Statute by Making Fraudulent Statements About its Supplement Prevagen

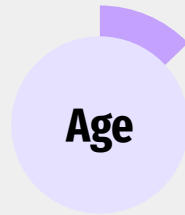




What happens to brain power?

Thinking, remembering, doing math, making decisions, using words

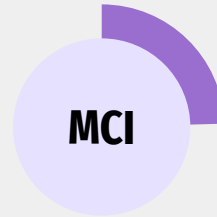
Age-Associated Changes



Age

Slower
More repetitions
Knowledge improves

Mild Cognitive Impairment



MCI

More decline
doesn't interfere
with function but
does with
self-image

Dementia



ADRD

Enough decline
to interfere with
daily life

DEMENTIA



Umbrella term for loss of memory and other thinking abilities severe enough to interfere with daily life.

Alzheimer's:
60–80%

**Lewy Body
Dementia:**
5–10%

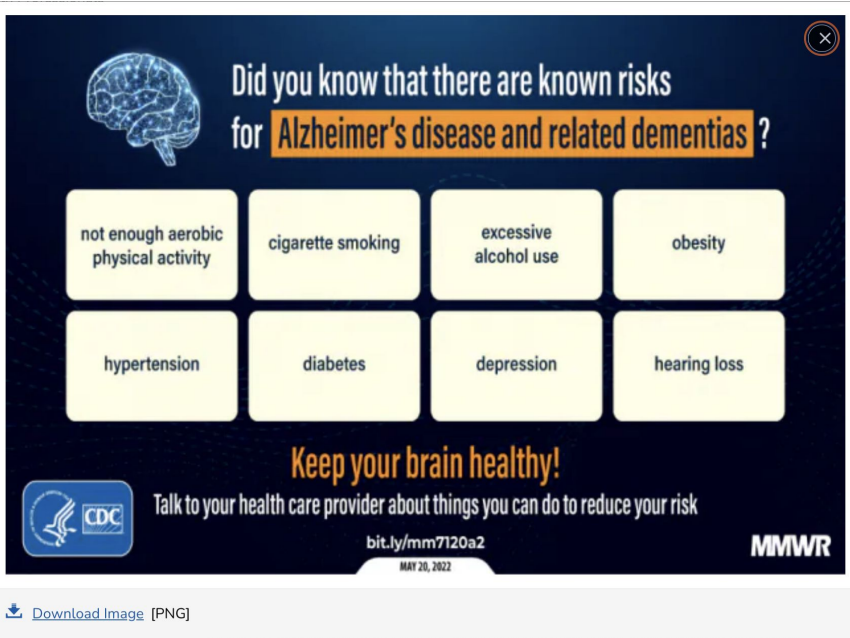
**Vascular
Dementia:**
5–10%

**Frontotemporal
Dementia:**
5–10%

**Others:
Parkinson's
Huntington's**

Mixed dementia:
Dementia from more than one cause


DEMENTIA PREVENTION IS POSSIBLE, not the only goal



Did you know that there are known risks for **Alzheimer's disease and related dementias** ?

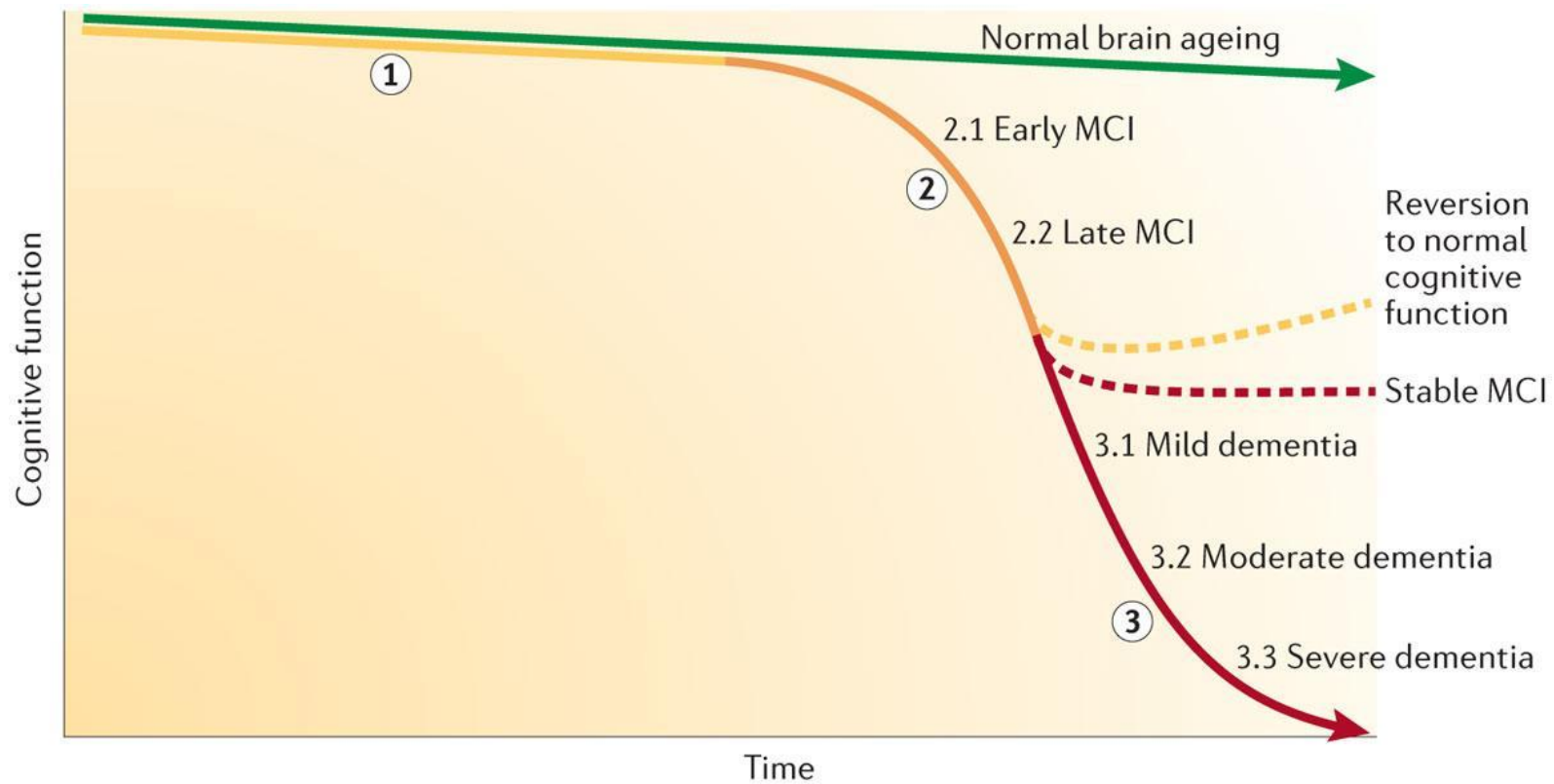
not enough aerobic physical activity	cigarette smoking	excessive alcohol use	obesity
hypertension	diabetes	depression	hearing loss

Keep your brain healthy!
Talk to your health care provider about things you can do to reduce your risk

 bit.ly/mm7120a2 **MMWR**
MAY 20, 2022

[Download Image](#) [PNG]

- Terminology
 - Primary, Secondary, Tertiary
- Approaches
 - Reduce risk
 - Increase protection



Risk factors

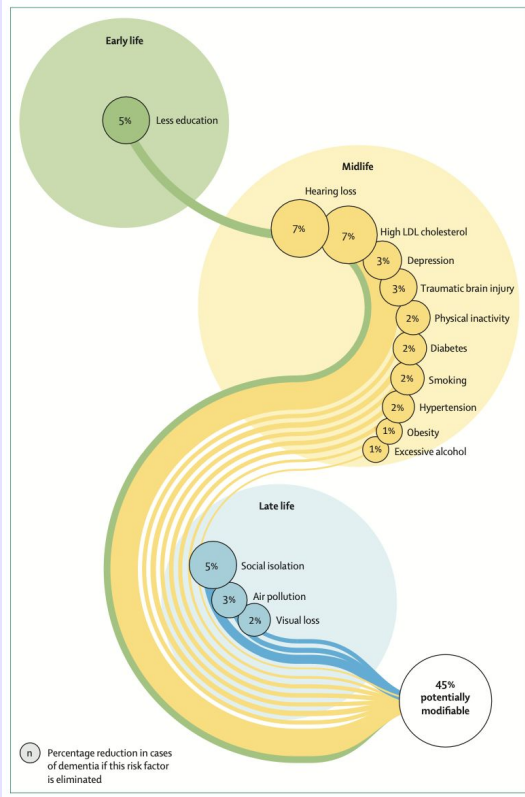


Figure 9: Population attributable fraction of potentially modifiable risk factors for dementia

14 modifiable

Life Course

45%

Pathways

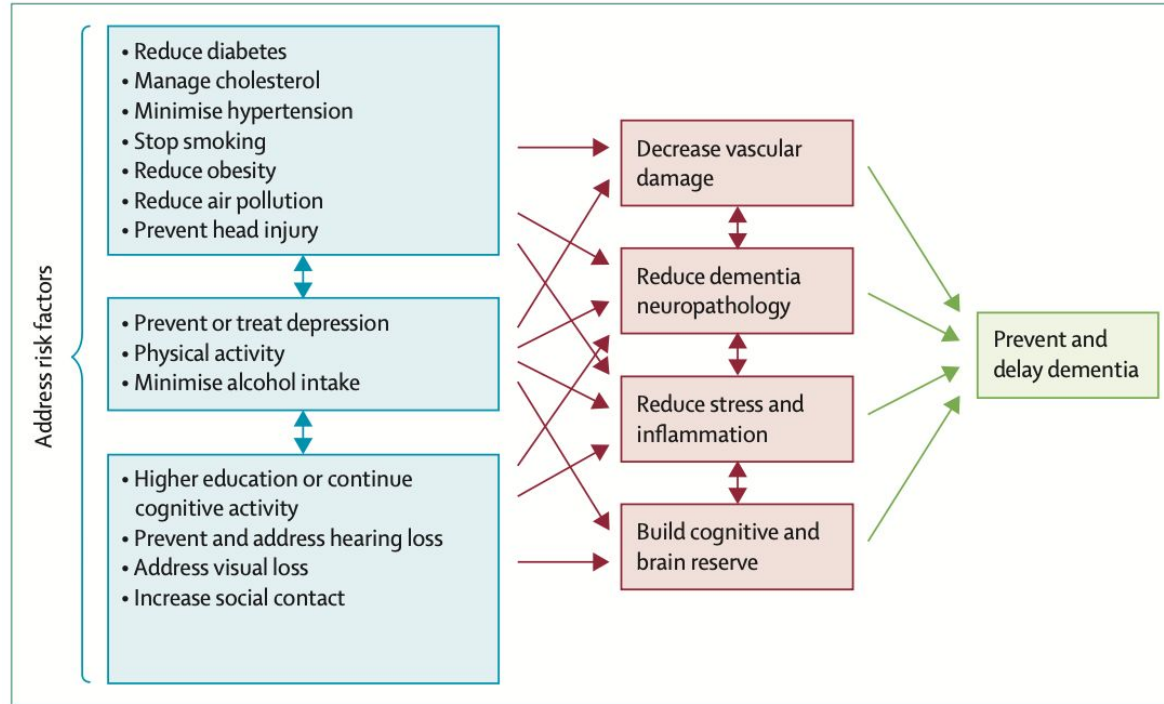
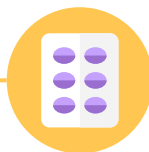


Figure 2: Possible brain mechanisms for enhancing or maintaining cognitive reserve and risk reduction of potentially modifiable risk factors in dementia

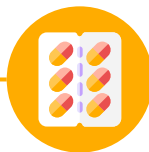
Dementia Drugs

Drugs that slow down getting worse



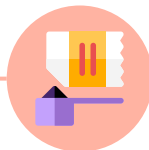
Cognition Enhancers

Donepezil, Memantine



Disease Modifiers: The MABs

Remove amyloid which is thought to play a role



Other co-occurring symptoms

Antidepressants, Apathy



Monoclonal antibody therapies:

**Aducanumab (Aduhelm)
Lecanemab (Leqembi)
Donanemab**

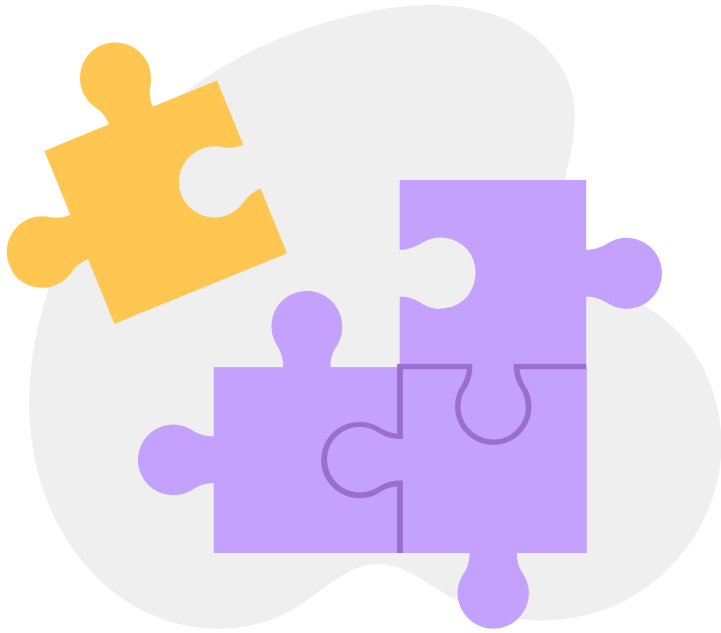
Apolipoprotein E ϵ 4 (ApoE ϵ 4) homozygotes (approximately 15% of Alzheimer's disease patients) treated with this class of medications, have a higher incidence of ARIA, including symptomatic, serious, and severe radiographic ARIA

Based on amyloid hypothesis

**Act like the body's immune
system**

Very early stages only

NB: Black Box Warning



Here's what you can do!
To stay healthy
To reduce risk
To live well with dementia

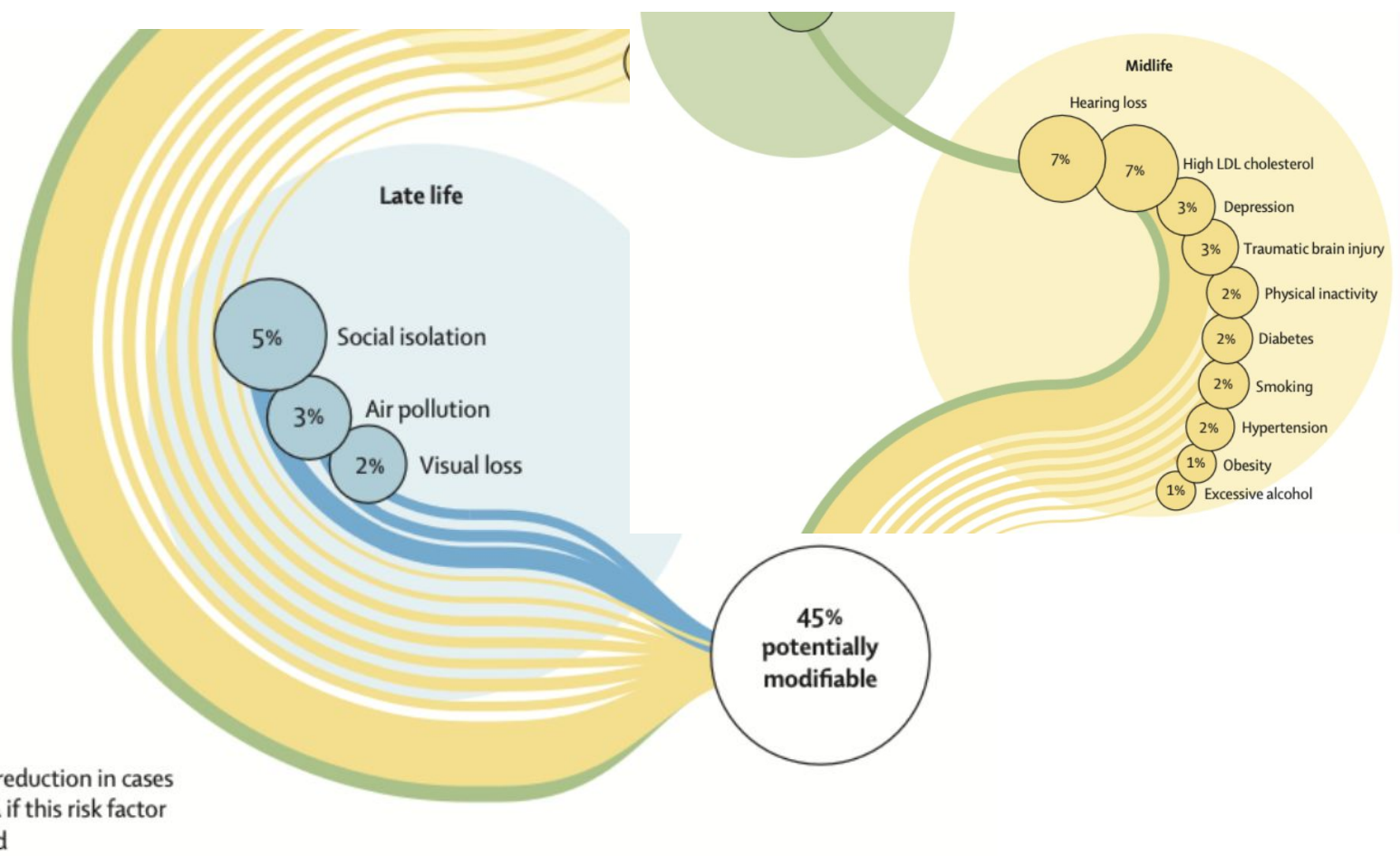


Figure 9: Population attributable fraction of potentially modifiable risk factors for dementia

Life Course Approach: Key Factors Late Life (65+)



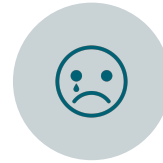
DIABETES



SMOKING



VISION



DEPRESSION



SOCIAL
ISOLATION



PHYSICAL
INACTIVITY



Exercise your body

14 interventions

Jl of Neurology 2017

Exercise increases

Brain connections

Reduces stress hormones

Helps blood flow

Best way to...

- Improve learning and memory
- Protect from brain cells from dying
- Lift spirits and improve depression

BOTTOM LINE:

150 min/week (30 min/day)
Aerobic (heart rate up) activity

Exercise (and rest) your brain



Challenging Mental Activity

- Creative arts, new skills, lifelong learning

Sleep/Sleep Apnea

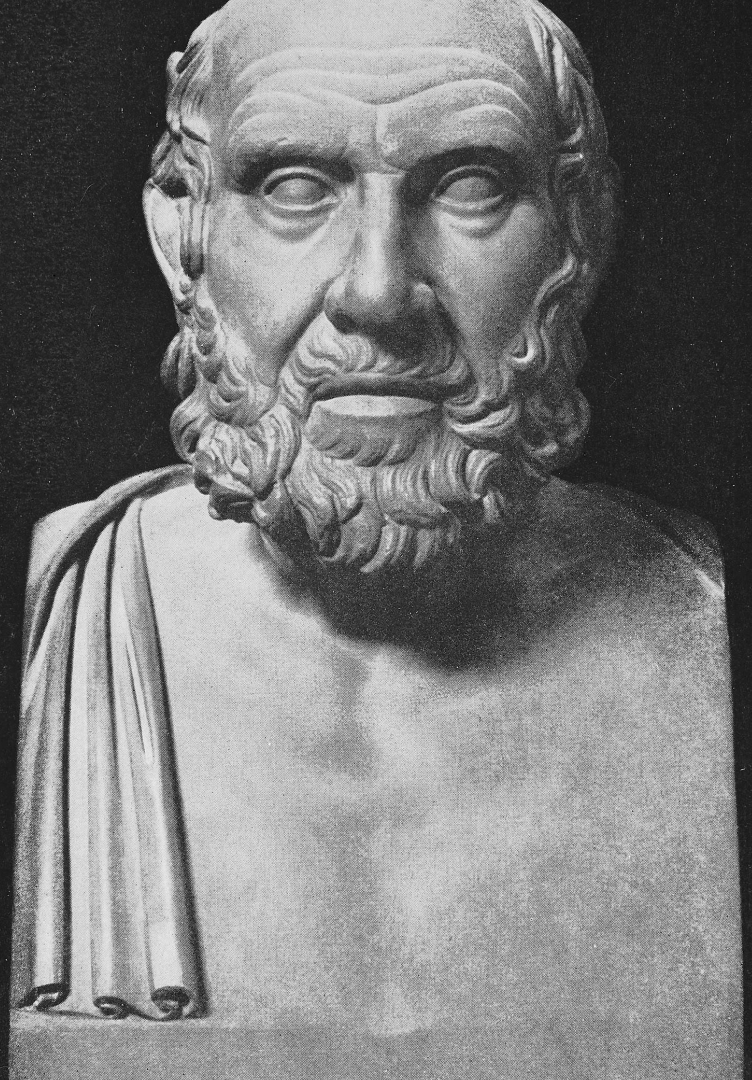
- 7-9 hours/night

Stress Reduction

- Meditation, Mindfulness, Prayer
12-20 minutes/day
Natural world

**“That which is used,
develops,
that which is not, wasteth
away”**

Hippocrates 460-337 (B.C.)



**Exercise your
spirit!**

**Friends
Purpose**



Eat a Healthy Diet/Stay hydrated



- **Mediterranean**
- +**
- **DASH**
Dietary Approaches to Stop Hypertension
- **MIND**

Eat a Healthy Diet

Focus on

vegetables, [fruits](#), nuts, seeds, legumes, potatoes, whole grains, herbs, spices, fish, seafood, and [extra virgin olive oil](#)

Low to moderate consumption

poultry, [eggs](#), cheese, yogurt, red wine

Limit or avoid

[red meat](#), sugar-sweetened beverages, [added sugars](#), processed meat, refined grains, other [highly processed foods](#), beers, and liquors



**Reimagining
Dementia**

A Creative Coalition for Justice

**Towards
a dementia-
inclusive
society**

WHO toolkit
for dementia-friendly
initiatives (DFIs)



World Health
Organization

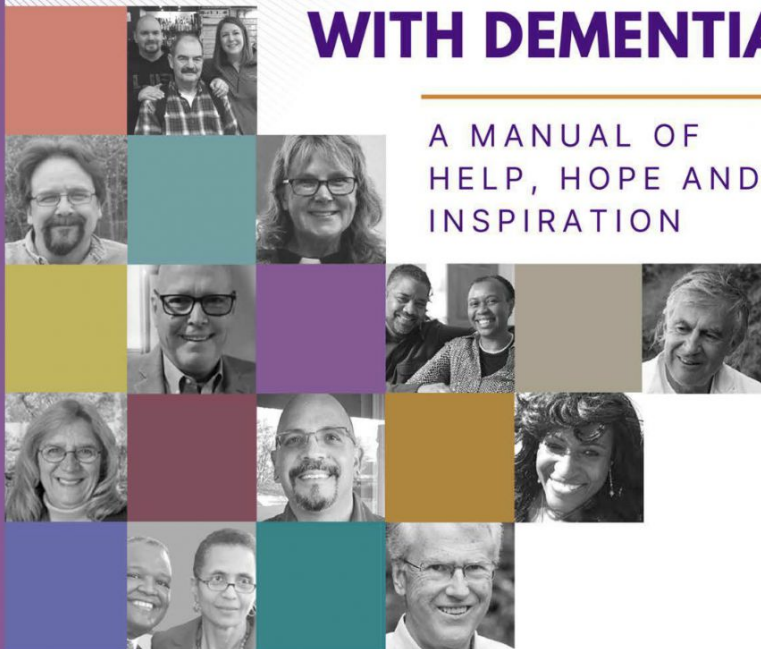


**Research Project:
Optimal Engagement for
People Living with Dementia**

**Paradigm Shift:
From cure to
chronic disease
management and
living well**

PATHWAYS TO WELL-BEING WITH DEMENTIA

A MANUAL OF
HELP, HOPE AND
INSPIRATION



**Essential information by
people living with dementia,
care partners and leading
dementia specialists.**

Developed by:



Dementia Action Alliance

Creating a better society in
which to live with dementia



**Technology helps
balance safety
with greater
independence**



Where to start?

Attitude Matters

“Older individuals with more positive self-perceptions of aging outlived those with less positive self-perceptions of aging by 7 ½ years”



Take a Personal Inventory

01

Schedule an annual Wellness visit

02

Ask for a cognitive screen

03

Choose one new activity

04

**“To get back my youth I
would do anything in the
world,**

**except take exercise, get up
early, or be respectable”**

The Picture of Dorian Gray, 1891



Thank you for your attention

Let's chat

agingme.org



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INNOVATION FOR A HEALTHIER PLANET

