

Can A Healthy Lifestyle Protect Your MIND?



Laura Baker, PhD
Wake Forest School of Medicine

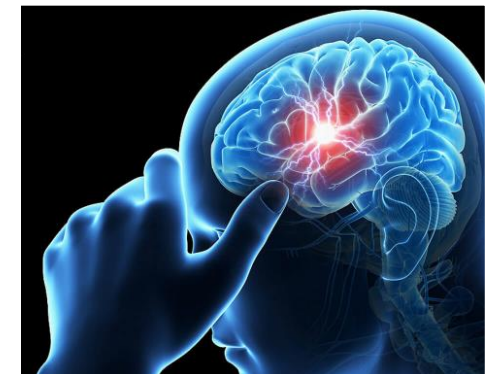
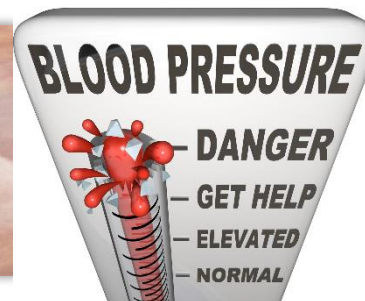
**Lead Investigator of WHISPER & COSMOS-Mind
(2 sub-studies of WHI)**

Lifestyle and Risk of Cognitive Decline & Dementia

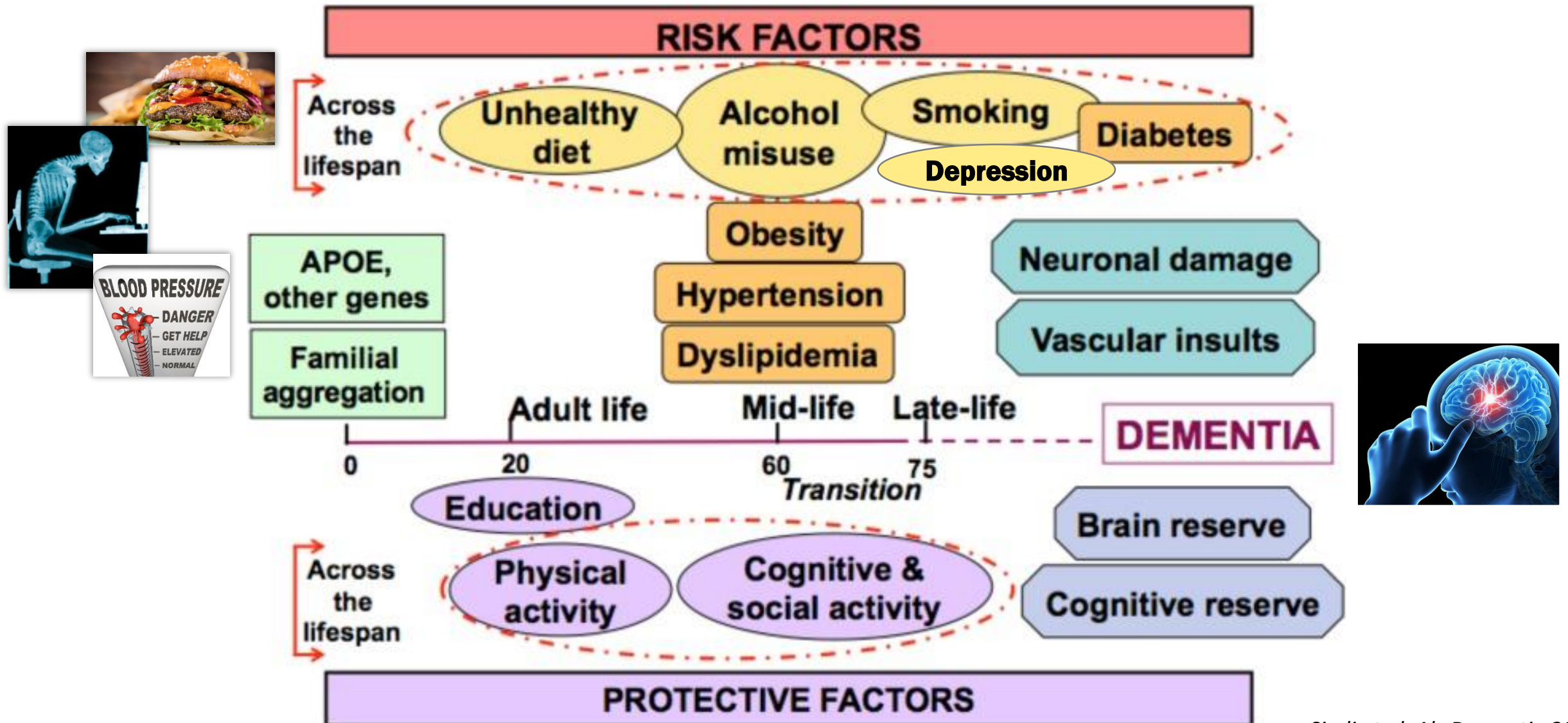
- Behaviors ?
 - Sedentary
 - Poor diet
 - Social isolation
 - Low cognitive stimulation



**chronic
exposure**



Healthy and Un-Healthy Aging: Importance of Chronic Exposure to Multiple Factors



What Science Tells Us About Preventing Dementia

There are no instant, miracle cures. But recent studies suggest we have more control over our cognitive health than we might think. It just takes some effort.



Certain factors that could contribute to dementia risk are also things that people can control, like diet and exercise. Credit: Jens Bonnke

By Anne Tergesen

November 17, 2019, 10:30 a.m. EST

1. Blood Pressure Control

2. Exercise

3. Cognitive Training

4. Diet

5. Sleep

6. Combination

THE WALL STREET JOURNAL.

RISK REDUCTION OF COGNITIVE DECLINE AND DEMENTIA

WHO GUIDELINES

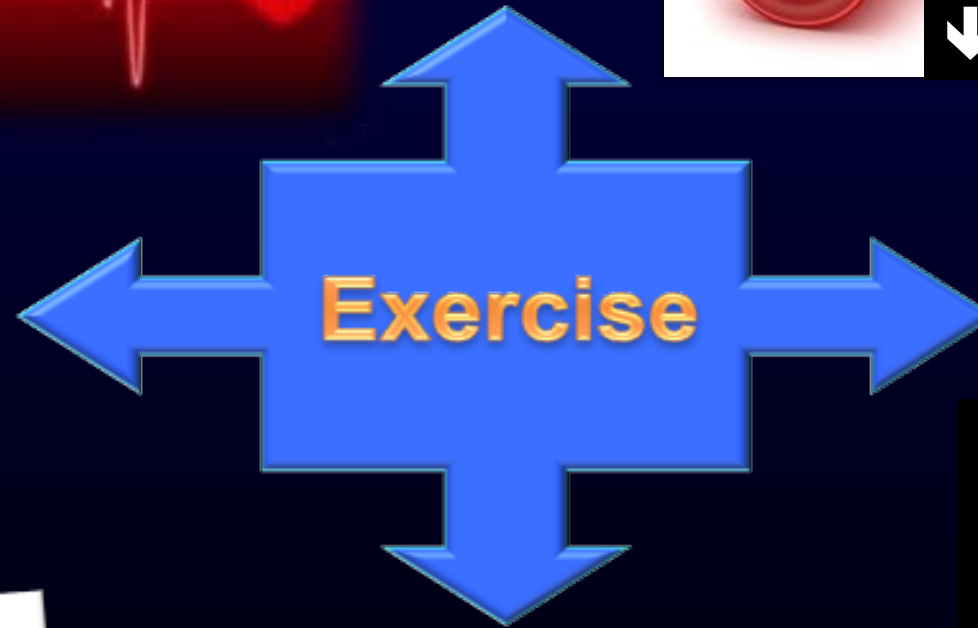


Evidence review	
Physical activity	Overweight
Tobacco	Hypertension
Alcohol	Dyslipidemia
Diet	Diabetes
Cognitive Training	Depression
Social Activity	Hearing loss



↓ cholesterol

Reduces
stress &
improves
mood



~~type 2
diabetes~~



2
In the Brain...



Promote new connections?



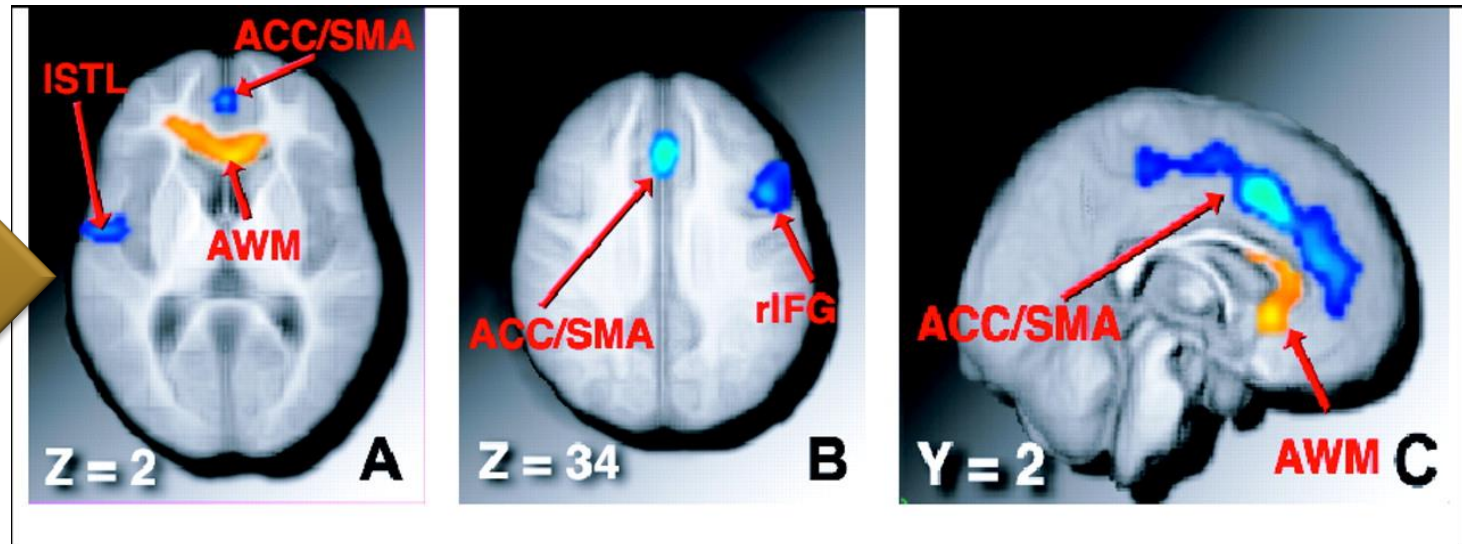
Resistance to injury & death?



Prevent/slow Alzheimer's?

++ Exercise Effects on Brain in Cognitively Normal Older Adults

Brain volume increased with 6 months of aerobic exercise
(Colcombe et al, 2006)

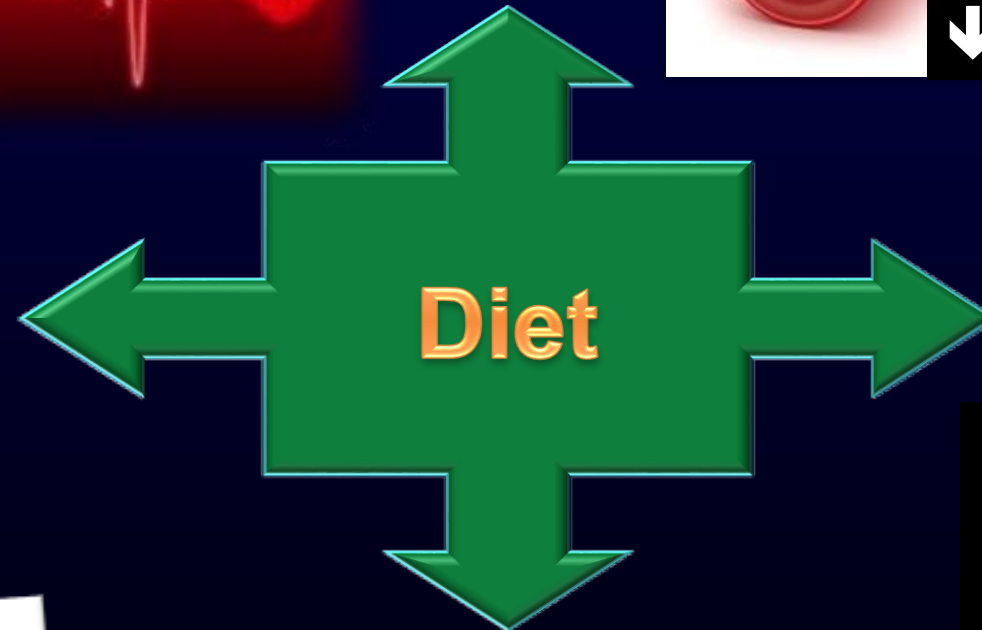


++ cognitive signal to exercise in RCTs also reported for adults with lower cognitive scores & subjective complaints (Lautenschlager 2008) and in adjudicated MCI (Baker 2010)



↓ cholesterol

Reduces
stress &
improves
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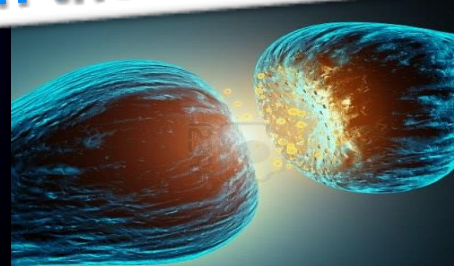


~~type 2
diabetes~~



In the Brain...

?



Promote new connections?



Resistance to injury & death?



Prevent/slow Alzheimer's?

Diet May Help Prevent Alzheimer's

March 16, 2015

MIND diet rich in vegetables, berries, whole grains, nuts

Newly published research suggests that a specific diet called the MIND diet may reduce the incidence of brain disease that increases a person's risk in developing **Alzheimer's disease**.

The recent study shows that the MIND diet lowered the risk of Alzheimer's by as much as 53 percent in participants who adhered to the diet rigorously, and by about 35 percent in those who followed it moderately well according to a paper published online on March 19 in the journal *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*.



Dr. Martha Clare Morris
Rush University

Combination Therapy ...

- May increase overall 'DOSE' of lifestyle 'medicine'
- Allows for personalized TAILORING of the lifestyle program for cultural practices, physical limitations and logistical challenges



Healthy Lifestyle (one example)

physical activity, a healthy diet, and regular mental & social Challenge





- People who regularly exercise (aerobic) have a lower risk of developing memory problems & dementia
- In clinical trials (people are assigned to one of 2 groups), 6 or more months of moderate-high intensity aerobic exercise (involves a bit of huffing and puffing) improves thinking abilities in older adults



- People who regularly eat foods with lots of color, especially leafy greens and berries, and lower amounts of animal fat and sugar have a lower risk of developing memory problems * dementia
- A big clinical trial is going on now to test whether a change in diet can improve thinking abilities in older adults

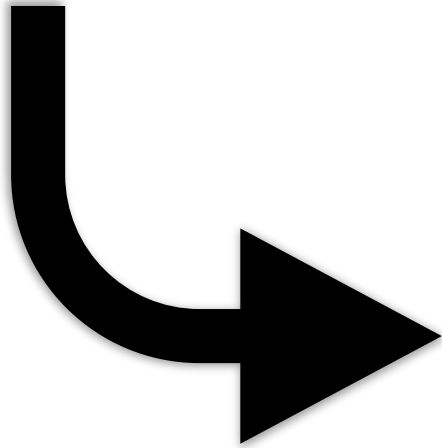
Zoom Meeting



- Mental and social “challenge” may protect brain health as we age
- In a large clinical trial (Active Trial), regular mental challenge improved memory and other thinking abilities in older adults

Healthy Lifestyle

physical activity, a colorful diet, and regular mental Challenge



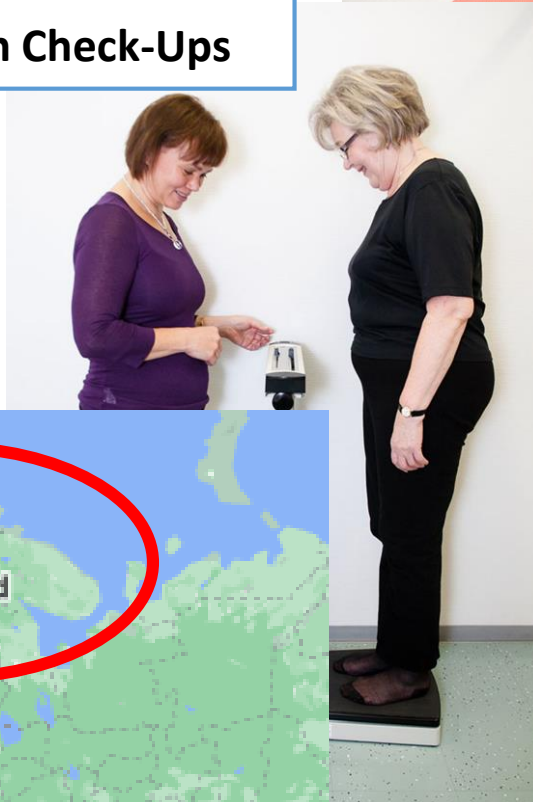
FINGER

INTERVENTION

Nutrition, Exercise

Cognitive & Social Challenge

Regular Health Check-Ups

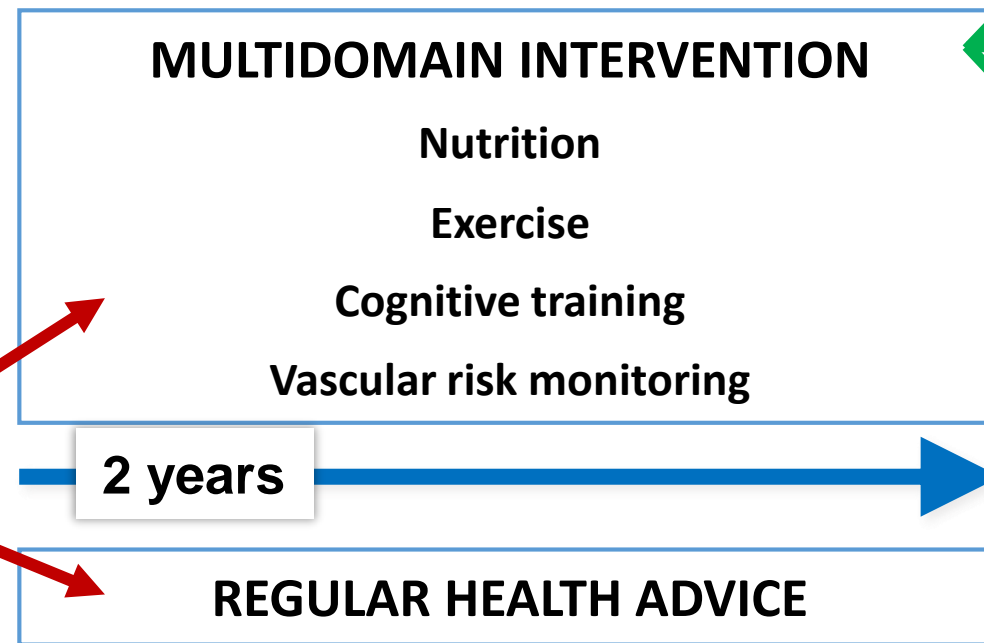


A 2 year multidomain intervention of diet, exercise, cognitive training, and vascular risk monitoring versus control to prevent cognitive decline in at-risk elderly people (FINGER): a randomised controlled trial

Tiia Ngandu, Jenni Lehtisalo, Alina Solomon, Esko Levälahti, Satu Ahtiluoto, Riitta Antikainen, Lars Bäckman, Tuomo Hänninen, Antti Jula, Tiina Laatikainen, Jaana Lindström, Francesca Mangialasche, Teemu Paajanen, Satu Pajala, Markku Peltonen, Rainer Rauramaa, Anna Stigsdotter-Neely, Timo Strandberg, Jaakko Tuomilehto, Hilikka Soininen, Miia Kivipelto

FINGER

N = 1260
Age: 60-77 years

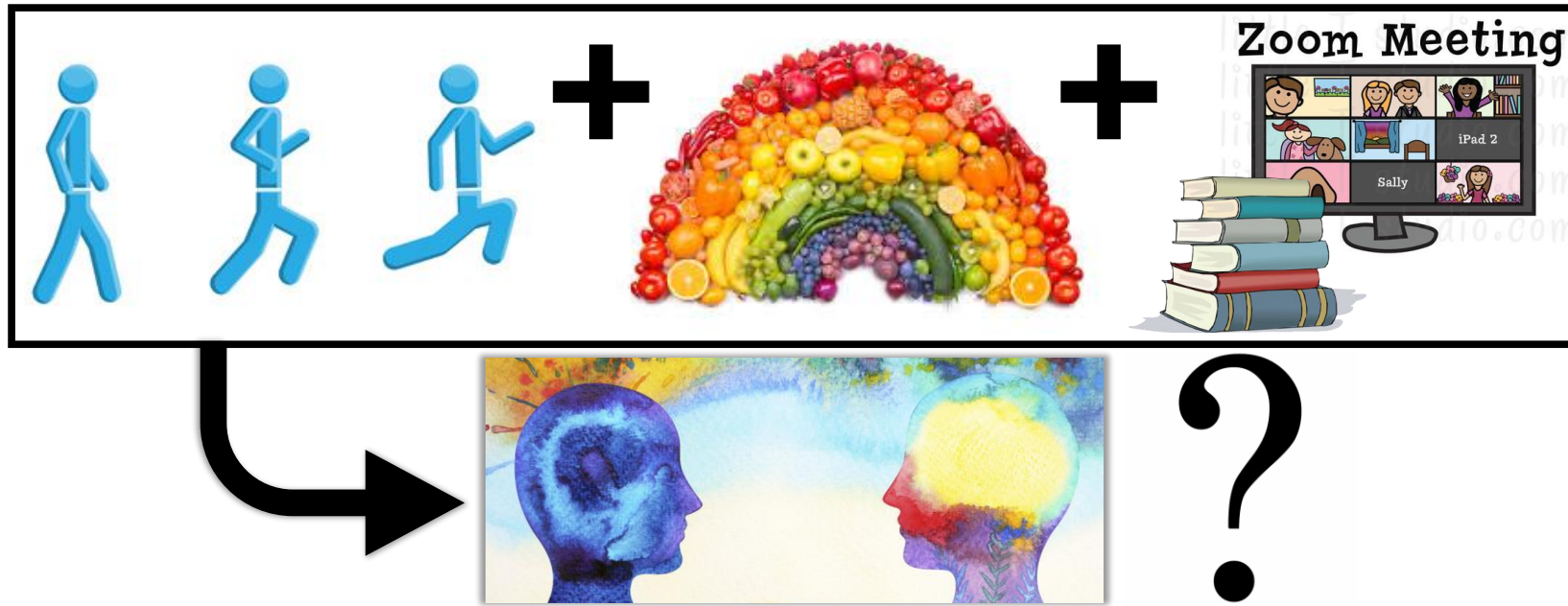


Improved
Cognition

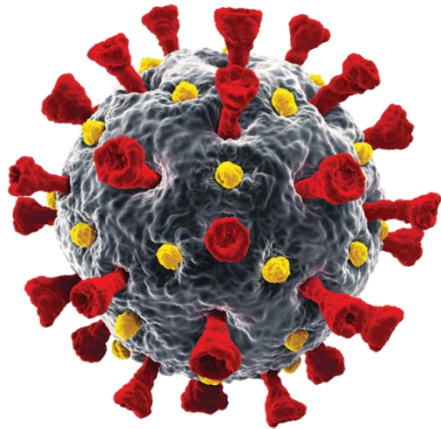
Fewer
Chronic
Illnesses

Less Decline
in Function

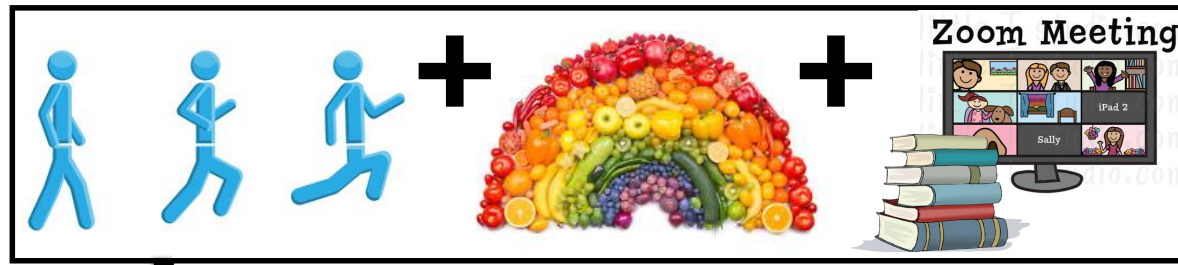
Extended 5- & 7-year follow-up in progress...



Sounds good, but right now....



I don't have time
I'm low on energy
I'm looking for
comfort
I'm feeling stressed



Tired
Loss
Isolation
Frustration
Sadness

COMFORT

GROWTH
CHALLENGE

Strength
Family
Community
Resilience



TAKE HOME TIPS ...



- **Move your body:** set goals for walking every day, walk first thing in the morning, park further away, walk with a friend, take the stairs (notice how you feel)
- **Add color to your plate:** how will your meal make you feel? Make small changes to add more nutrition (nuts instead of cookies; yogurt instead of ice cream; olive oil instead of pork fat)
- **Stay connected** with your community: reach out to family or friends if you are feeling lonely; get out of your comfort zone & introduce yourself to someone new
- **Learn something new** – whenever possible: read, watch an educational show, draw, paint, write, try a new recipe
- **Balance comfort with challenge:** finding comfort is important, but don't avoid challenge – growth does not occur without challenge → and challenge (by definition), it takes work





Stand up **straight** and
realize **who** you are, that you
tower over your circumstances.

- *Maya Angelou*



WOMEN'S HEALTH INITIATIVE

REAL CHANGE,
ENDURING
CHANGE,
HAPPENS ONE STEP
AT A TIME.
-RBG



RUTH BADER
GINSBURG

1933 - 2020

Supreme Court of the United States