

Sound Familiar?

I know I came in here for a reason?

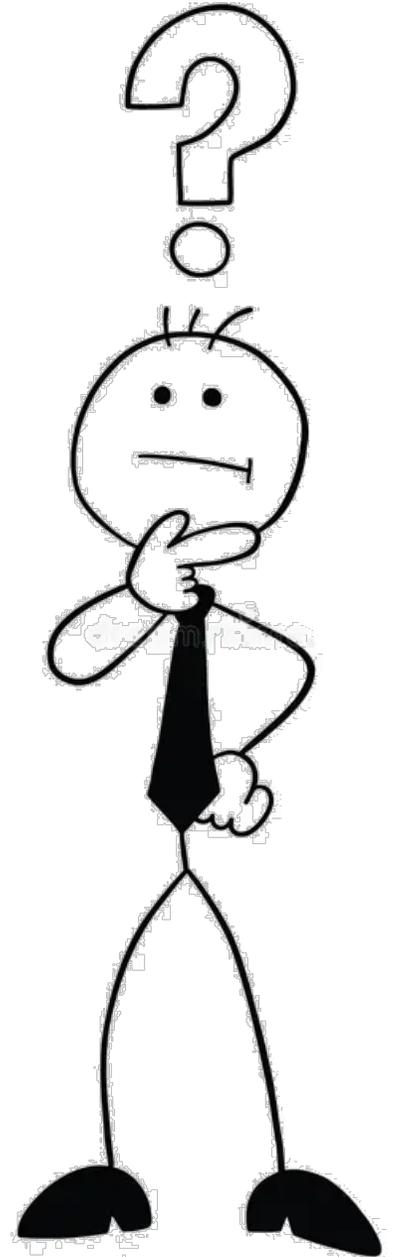
Where did I leave that phone?

I was going to tell you something....

What was the name of that movie?

I just saw it, now its not here....

I could have sworn I set that down right there...



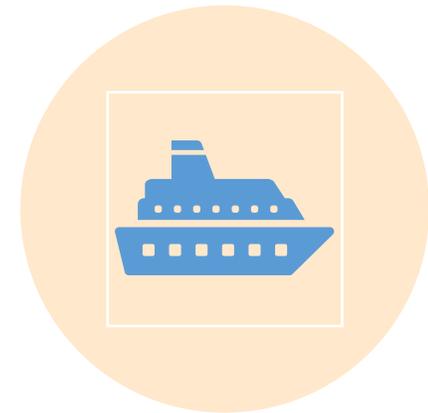
REMEMBER.....



CHAIR



BOOK



SHIP



The 7 Highly Effective Habits of Super-Agers

Michelle Miller

Retired Faculty, School of Public Health
Dept of Kinesiology-Indiana University

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An Aging Population.... *Promise or Peril?*

1 of 5 Americans are over 65-6500 more per day!

73 million boomers are turning 80-fastest growing age group are those over 85

Medical advances are expanding our capacity to live longer-but at what cost?

Memory peaks between the ages of 30-40 and brain volume begins to atrophy in our 50's

Cognitive decline is associated with "aging"; but does it have to?

Do we have control over our **brain health** as we age?

What exactly do we mean by Brain Health?

Refers to how well our brains help us function in daily life:

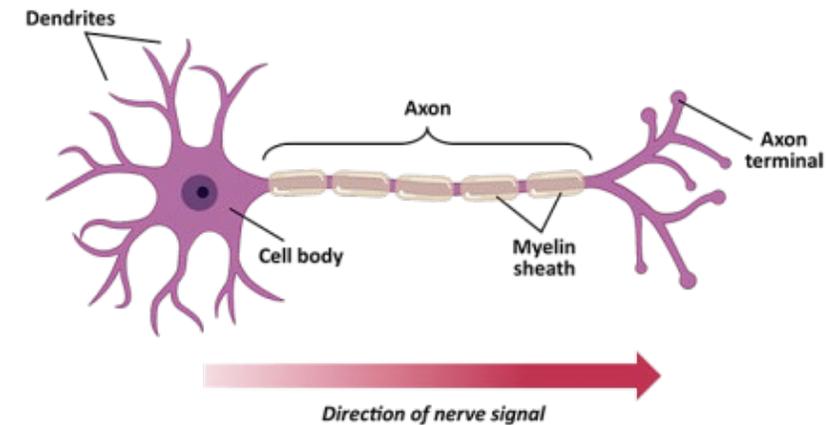
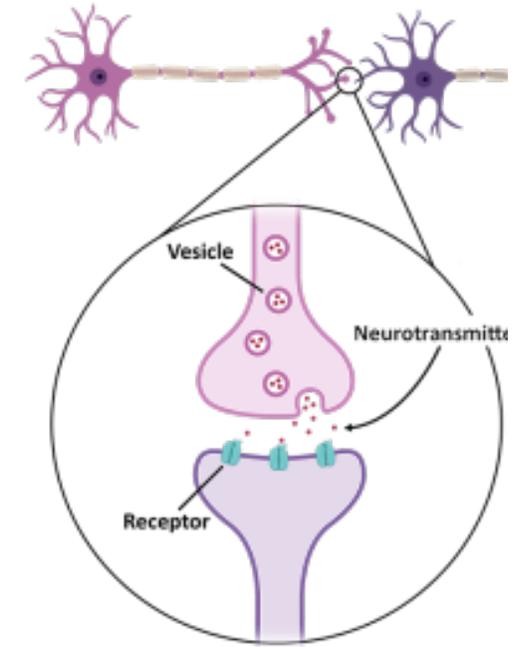
- Making good decisions
- Paying attention to details
- Solving problems
- Interacting successfully with others
- Maintaining both physical and emotional balance

Most of us have brains that will change as we age in similar and predictable ways; but this rare group of Super Agers seem to defy the odds.

How does the brain change as we age.....

The *Aging* Brain....

- Brain volume begins to shrink, particularly in the frontal lobe and hippocampus, which are involved in higher cognitive functions and memory.
- Cerebral Cortex (outer layer of brain) begins to thin affecting complex mental activities.
- Synaptic Connections decreases leading to slower communication between neurons.
- Fatty substance that insulates nerve fibers (myelin), shrinks, which can slow down processing and reduce cognitive function.
- Neurons shrink and retract their dendrites, which are the branched extensions that receive chemical messages from other neurons.
- The brain generates fewer chemical messengers (neurotransmitters) like dopamine, acetylcholine, serotonin, and norepinephrine, which can impact cognition, memory, and mood.





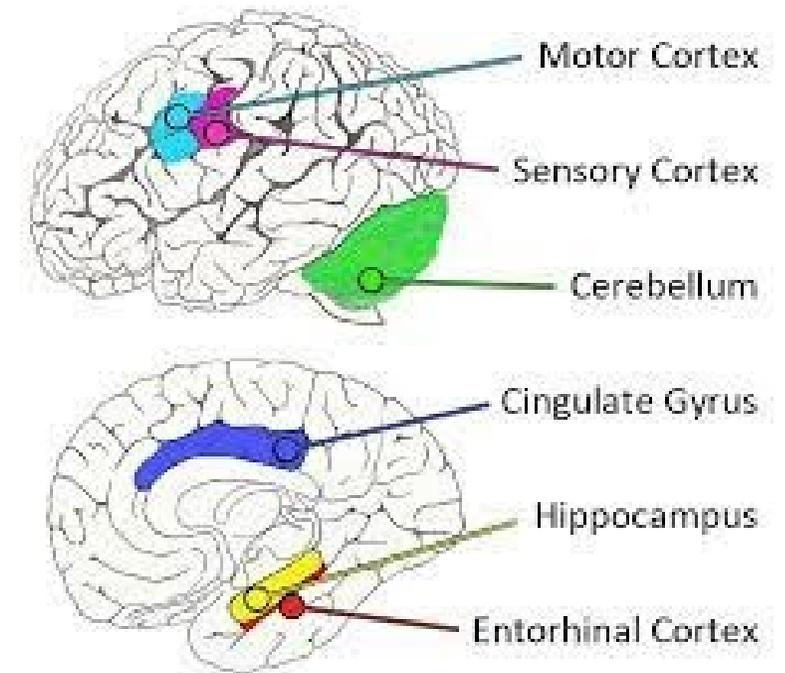
Who is a Super Ager?

- Term coined by Northwestern University researchers in 2008; now studied by many well-known institutions in US and Canada.
- A person must be over 80 and undergo an extensive battery of cognitive testing to determine their brain health status.
- Have extraordinary mechanisms that resist cognitive decline; when imaged their brains are comparable to those 20-30 years younger.
- Super agers demonstrate “outstanding episodic memory” or the ability to recall everyday events and past personal experiences with ease.
- Interestingly, when compared to normal agers, they have similar levels of IQ and may show pathologies for dementia.

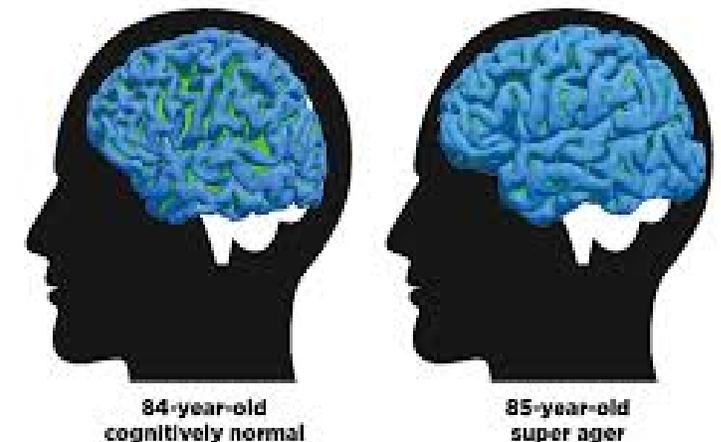
So, What else do we know?

Super Ager Brains Behave Differently.....

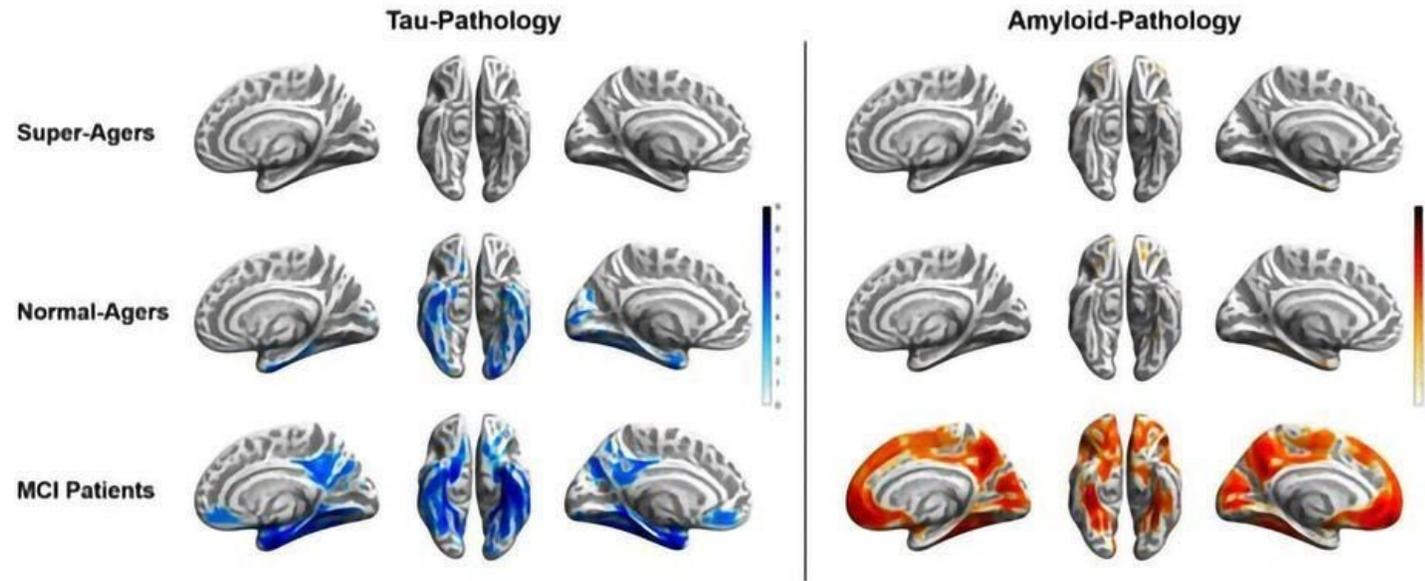
- Brains seem to be “shrink” resistant-losing volume (1.06% vs 2.24% of their peers) at a slower rate in areas of the brain associated with memory and focus.
- Cingulate cortex, region of brain responsible for information processing is thicker-meaning better functioning.
- Contain a higher density of von Economo neurons which are linked to our social awareness or the ability to understand and act on our thoughts, feelings and behaviors.
- SA have less Brain Trash leading to neurodegenerative diseases and imminent cognitive decline.



MRI scans (reconstructed) show normal cognitive decline versus a super ager.



Brain Trash...

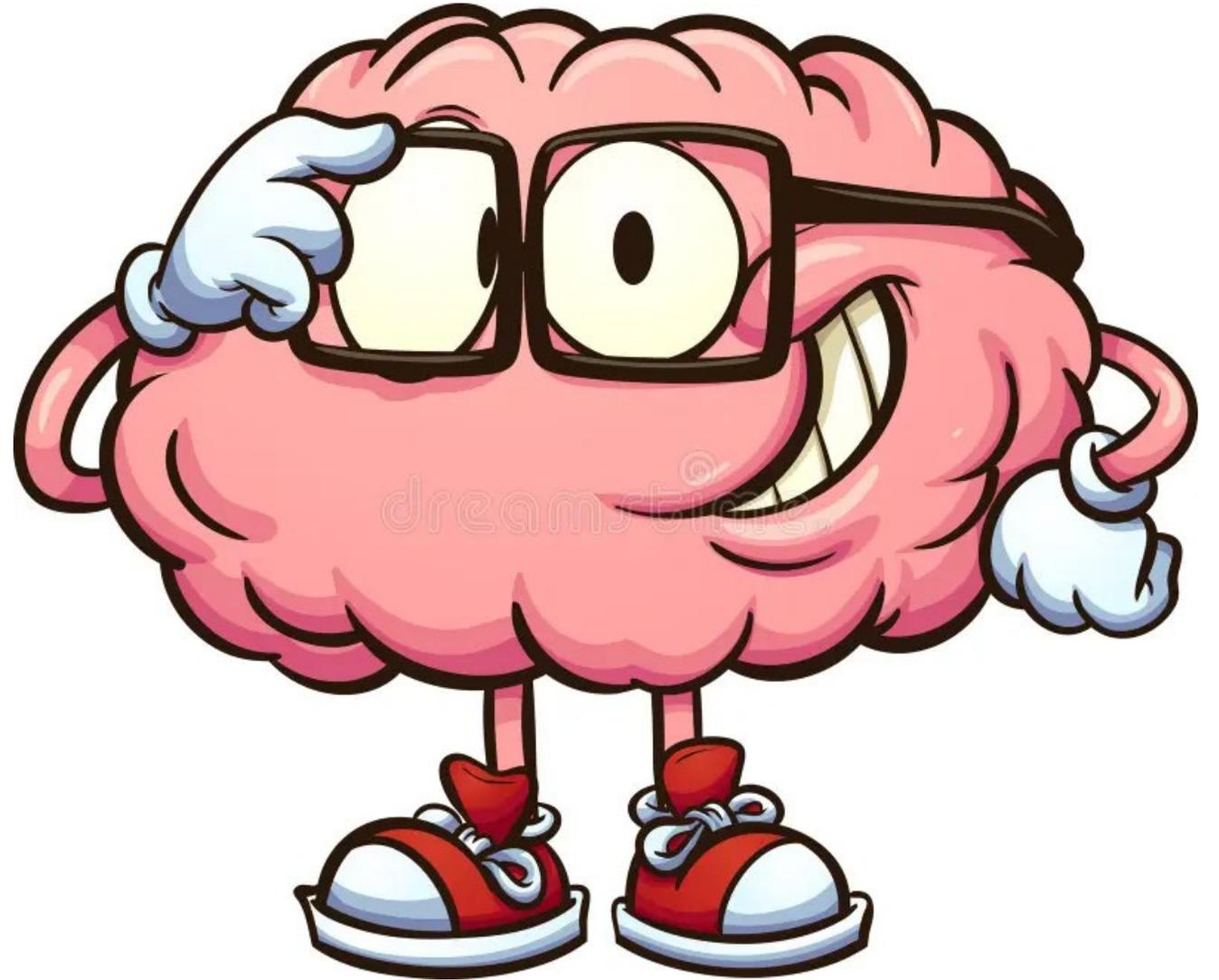


Impairs communication inside and between cells through:

- **Tau Tangles** - proteins inside the cell that transport nutrients but must be folded in a certain way-when this changes the proteins begin to tangle which damages the cell's inner skeleton and impairs communication between cells.
- **Amyloid Plaques** - sticky long toxic proteins that form between brain cells and interfere with communication of signals which impacts everything we attempt to do.

BRAIN BUILD

Name something that begins with the letter “T” and can move.



Things that
begin with

T t



tree



tiger



tractor



t-shirt



teapot



turtle

And They
All Move!!



Super Agers Defy the Decline..WHY?

- **Cognitive reserve:** able to overcome common wear and tear of an aging brain
- **Life exposures:** education and occupation
- **Genetic role:** could it be DNA driven?

But the one that stands out most....

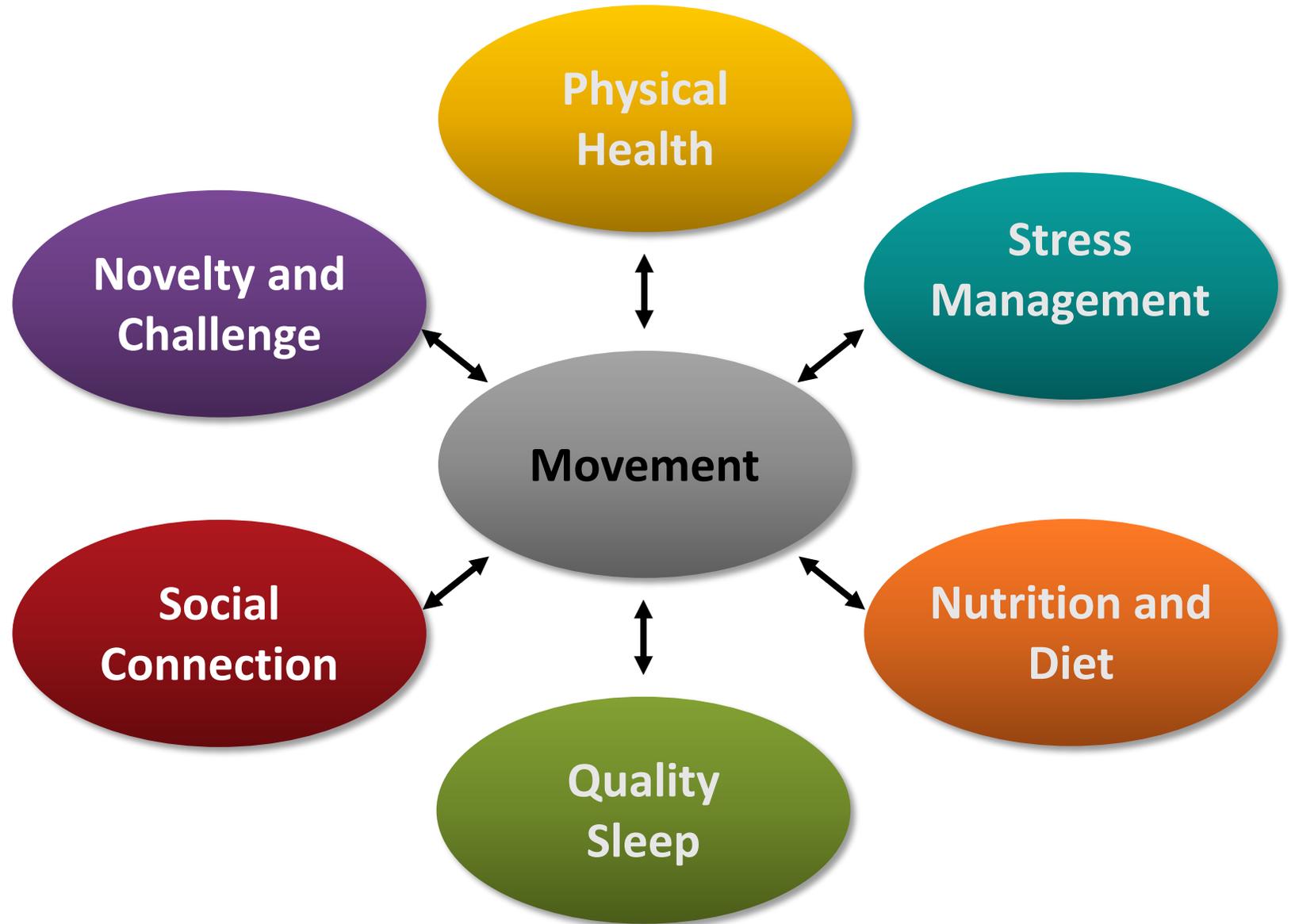
“Our Lifestyle Choices and Behaviors”



7 Highly Effective Habits of a Super Ager

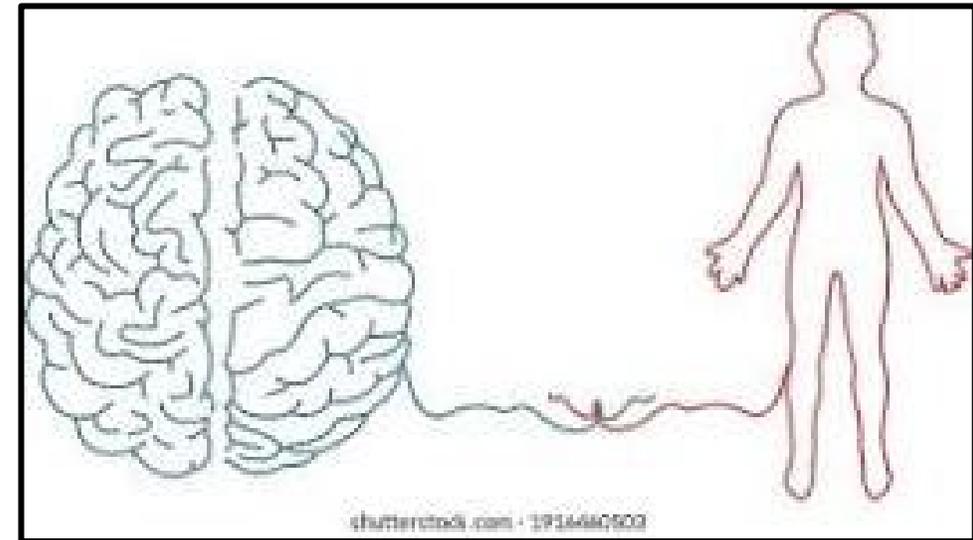


7 Highly Effective Habits of a Super Ager

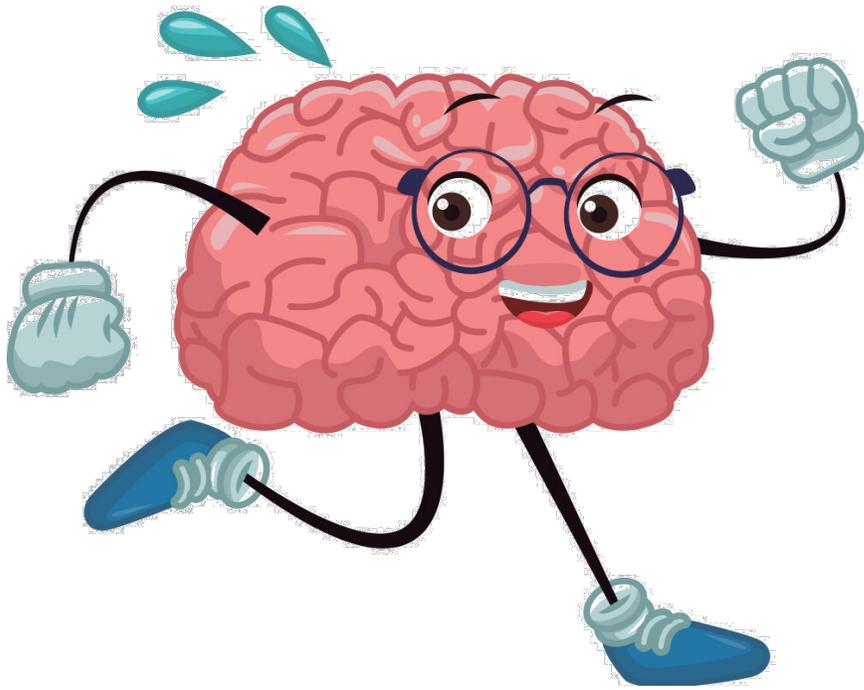


The Brain-Body Connection

- We move only because we have a brain.
- All sensations, thoughts, memories, feelings and motions are the result of electrical signals that pass through the nervous system (neurons).
- Movement occurs when the brain sends out electric signals via the nerves and spinal cord. These signals are then transmitted to our muscles, which contract to create the desired movement.



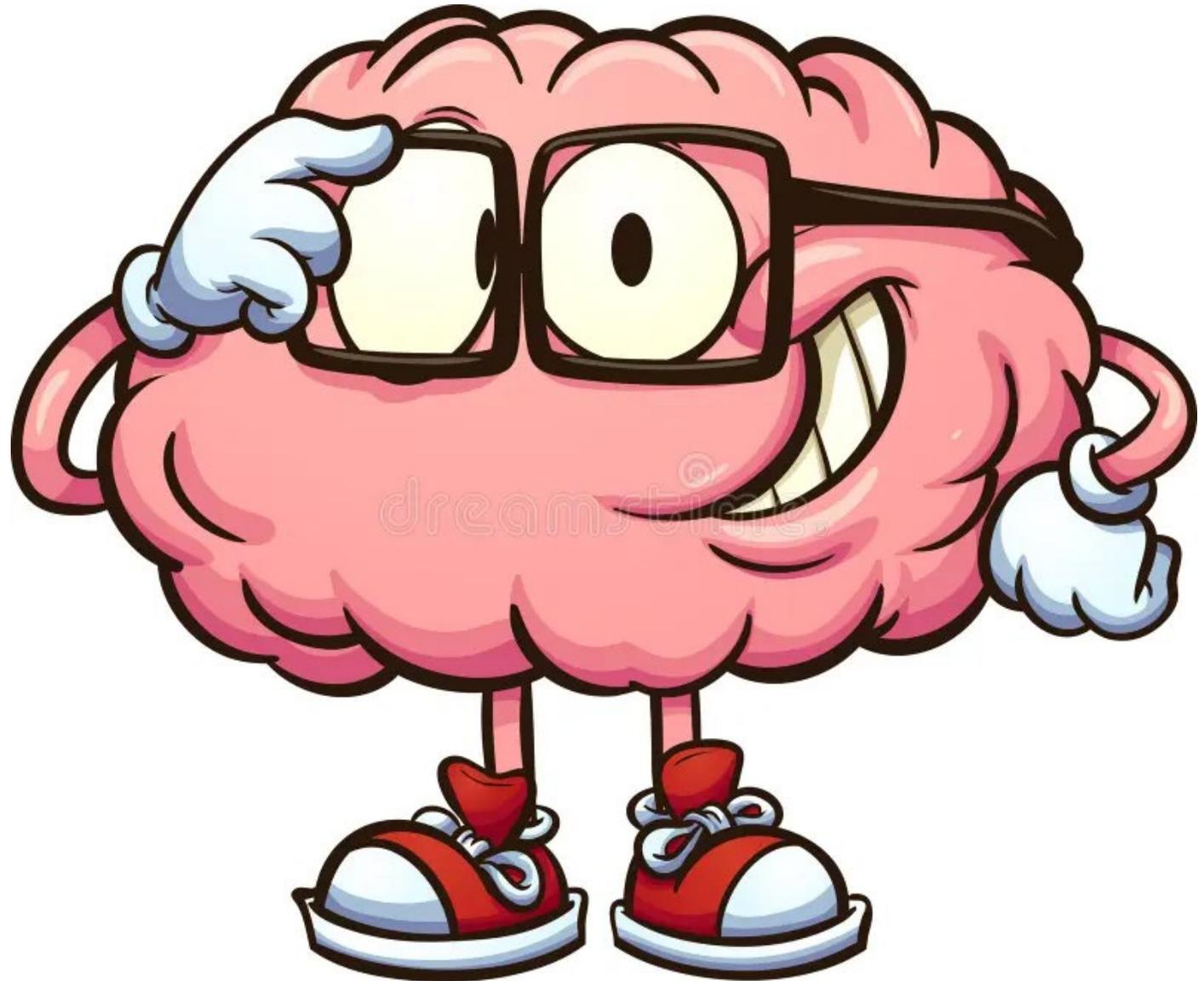
Impact of *MOVEMENT* on “THE SYSYEM”



- Reduces the risk for many debilitating diseases (cancers, obesity, diabetes, heart and lung)
- Enhances functioning of our immune system
- Reduces chronic inflammation
- Improves sleep quality
- Releases our “happy hormones” and affects our reaction to stress (mood, anxiety, depression)
- Provides opportunity to interact with others
- Enhances brain function
- Cheap, readily available and safe

BRAIN BUILD

Let's Play
"Back Words"
Or
Spelling Words
Backwards





DESSERTS spelled
backwards spells
STRESSED!

Give Us Something Specific.....

- We have discussed the WHY and now for the WHAT—are their specific movements or exercises?
- The Best Exercise is the One You will DO!
- NO Rocket Science—just Perseverance!
- Let's challenge the body and the brain and work them at the same time!!!

Regular exercise can reduce the risk of developing dementia by 28%.

- ALZHEIMER'S SOCIETY



Move your body every day!



- + MOWING
- + RAKING
- + DANCING
- + SWIMMING
- + HIKING
- + BIKING
- + WEIGHTS
- + SQUATS
- + RESISTANCE
- + PUSH-UPS
- + GARDENING
- + YOGA

Dual Task Training

- Almost everything we do in our everyday lives involves dual tasking or commonly referred to as “multi-tasking”.
- A dual task involves performing two tasks simultaneously to challenge our physical and mental status.
- Tasks could include various motor (movement) tasks with a cognitive (planning, decision making, executing) task.
- ***Let's practice.....***



Some Examples of Dual Tasking

Body Movements

Sit to stands

Push aways

Marching

Hip swings

Heel lifts

Hinges

Lift aways

Mind Movements

Counting games

Multiples

Spelling bee

Name that tune

Triple trauma

So, What Else Can We Do to Train our Brain...

- Test your Recall
- Let the Music Move You
- Do Mind Math
- Create Word Pictures
- Draw a Map from Memory
- Refine Your Hand-Eye Coordination
- Learn a New Sport
- Take a Cooking Class
- Learn a Foreign Language
- Move in a New Environment-GET OUTSIDE!!!



**NOVELTY AND
CHALLENGE**

THE POWER OF HUMAN CONNECTION

Human Connection is defined as an exchange of positive energy between people. "It is the energy that exists between people when they feel seen, heard and valued; when they can give and receive without judgement; and when they derive sustenance and strength from the relationship" (Brené Brown, 2010).



IMPROVES OVERALL
WELL-BEING



PROVIDES A
GREATER SENSE OF
MEANING IN LIFE



IMPROVES A
PERSON'S
RESILIENCE



LOWERS DEPRESSION
AND FEELINGS OF
ISOLATION



LOWERS PERCEIVED
STRESS



LOWERS INFLAMMATION
AND RESULTS TO BETTER
IMMUNE RESPONSE

Humans are innately social creatures-our minds and bodies crave social interaction much like we do food and sleep.

Socializing, sharing, relating to and with others releases “feel good” endorphins much like a good workout.

Connecting with others stimulates brain activity strengthening neural pathways for better cognitive processing (thinking and planning.)

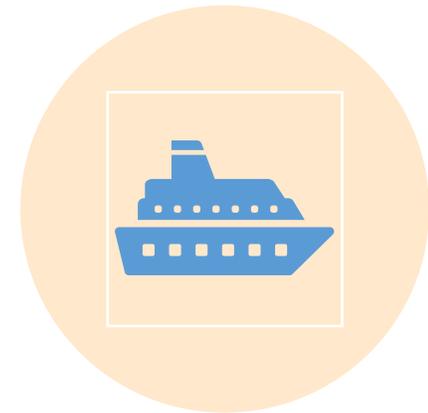
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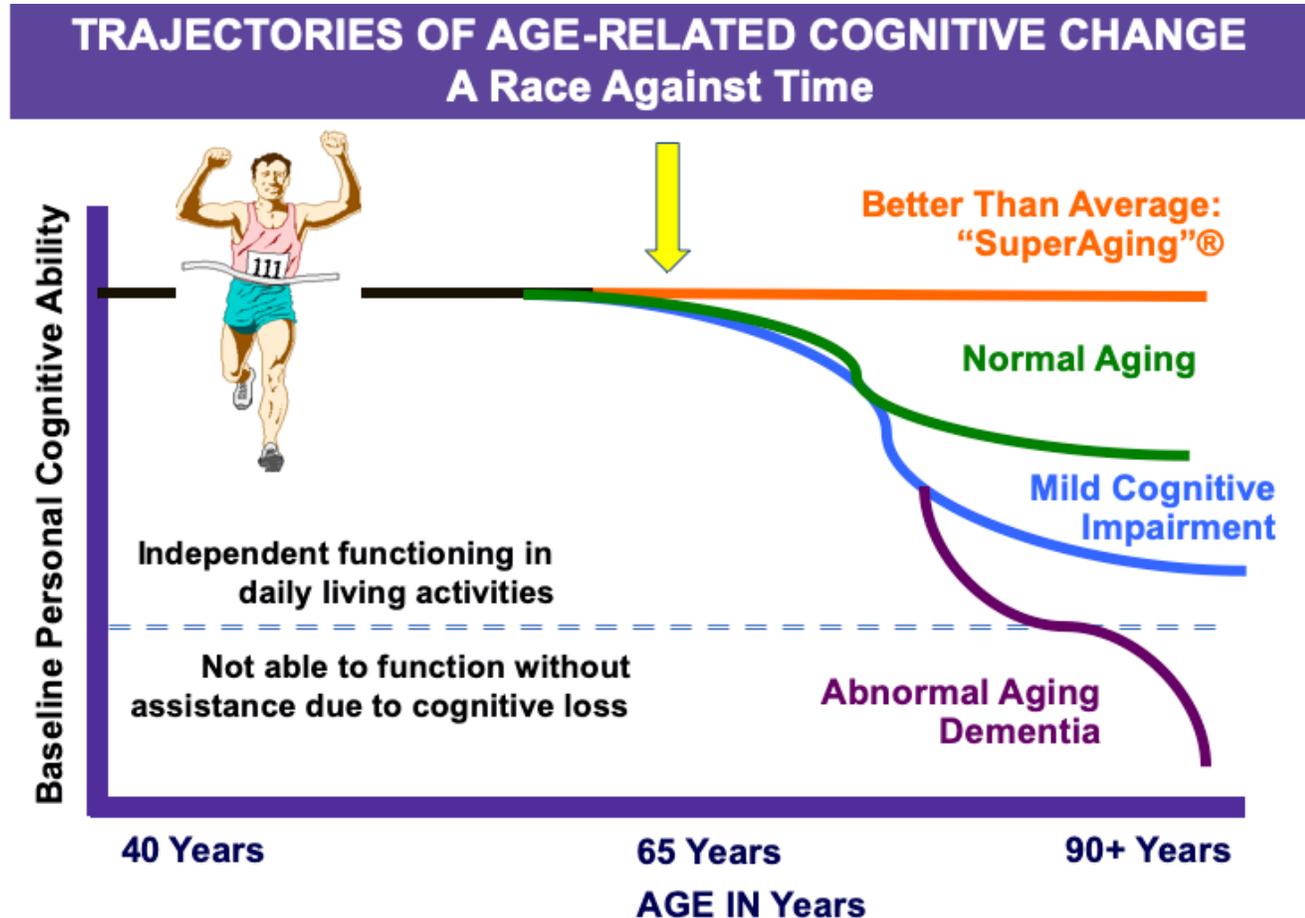
BOOK



SHIP

Super Agers Unite!

- We must guard against the automatic assumption that with aging comes physical and intellectual decline.
- We must all believe we can be *Super Agers* and that with a little work “good aging” is a real possibility.
- We must focus our efforts to be “better than average”

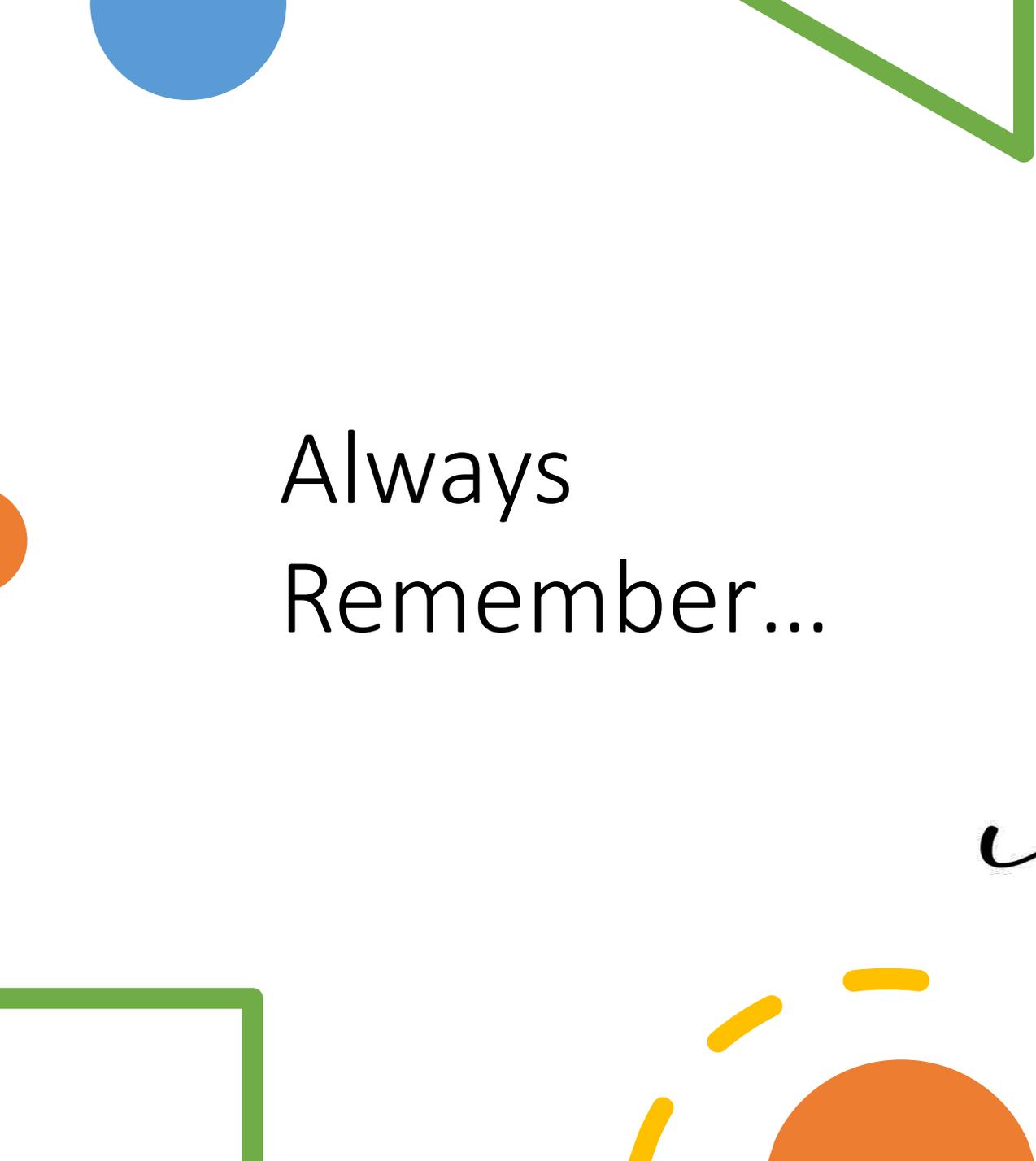


Take Home Wisdom Nuggets.....

- Understand the importance of resiliency for your brain and body
- Understand the importance of being consistent and persistent in all that you do
- Understand that competence builds confidence to move forward
- ***Understand that to survive and feel alive, we must strive to thrive!!***

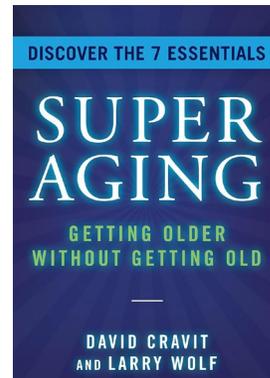
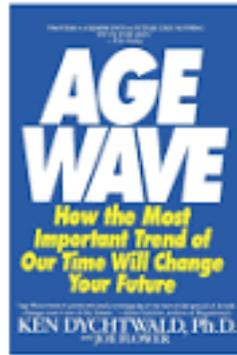
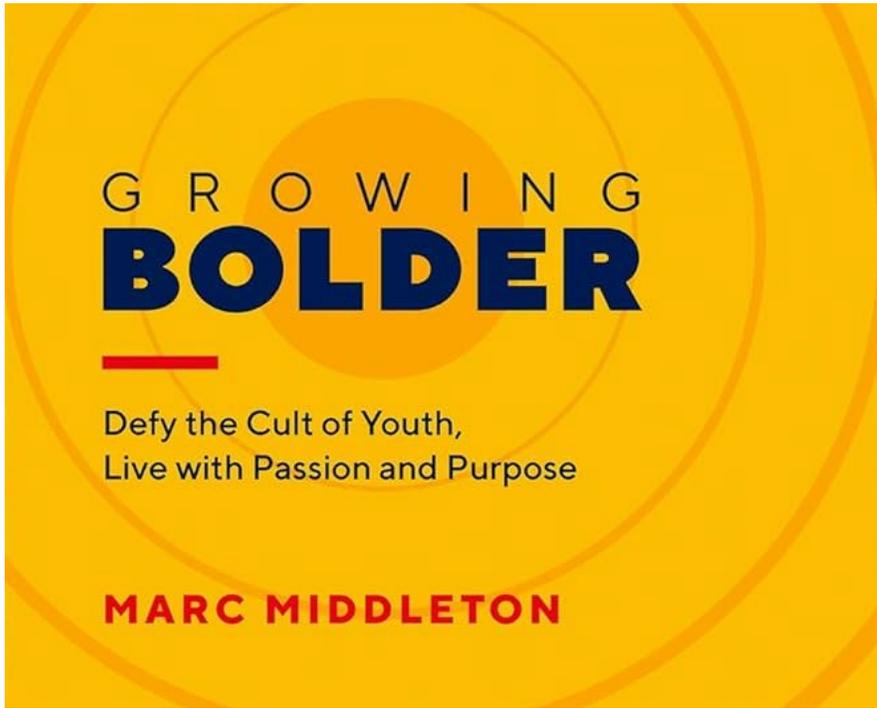
“MENS SANA
IN
CORPORE SANO”

(A healthy mind
in a healthy body)



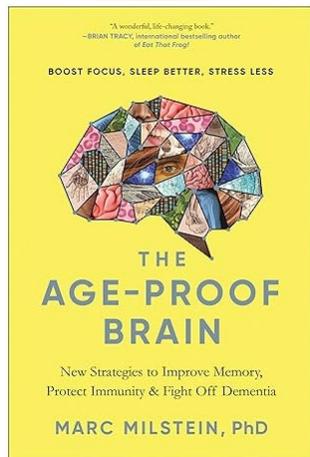
Always
Remember...

YOU ARE
kind
YOU ARE
smart
YOU ARE
important
♡



Awesome Resources

- Super Aging Research Program at NW University
<https://www.brain.northwestern.edu/join/SuperAging.html>
- Growing Bolder Website
<https://growingbolder.com/>
- Age Wave Website
<https://agewave.com/>
- Age Wave Report-New Age of Aging
https://agewave.com/content/uploads/2023/08/08-07-23-Age-Wave-The-New-Age-of-Aging-Report_FINAL.pdf



Michelle Miller
michmill@indiana.edu