

# Lifestyle Strategies for Brain Health

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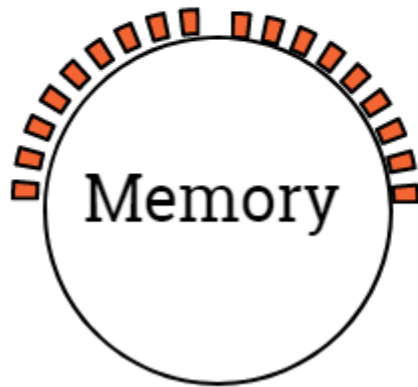
# Purposeful Memory & Attention Strategies

- Write it down
- Repeat it
- Chunking
- Meaningful connections
- Sensory connections
- Letter/word games
- Visualizations
- Story telling
- Song
- Movement before/after learning

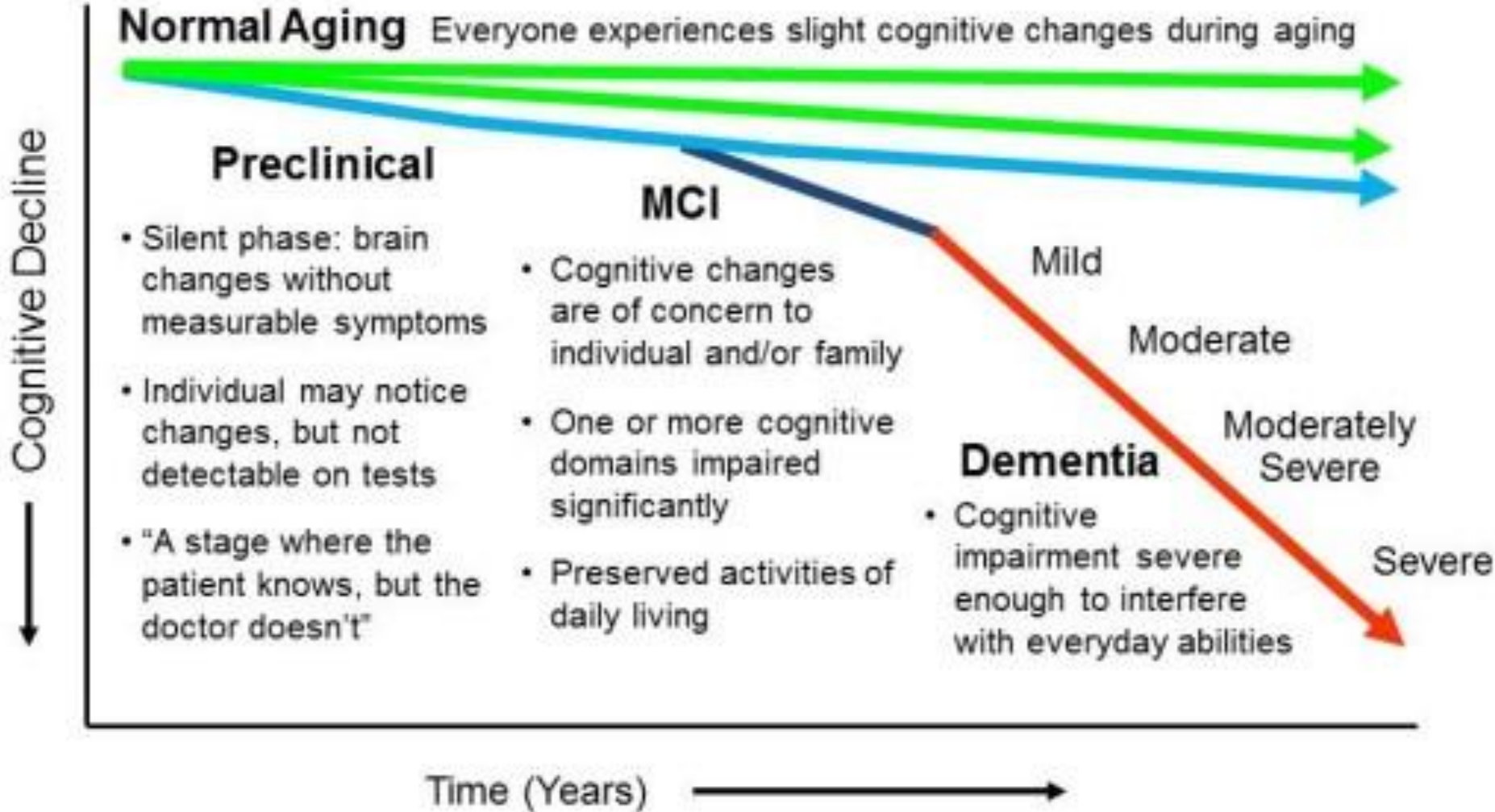


# What is Brain Health

## The Cognitive Domain "Volume Knobs"

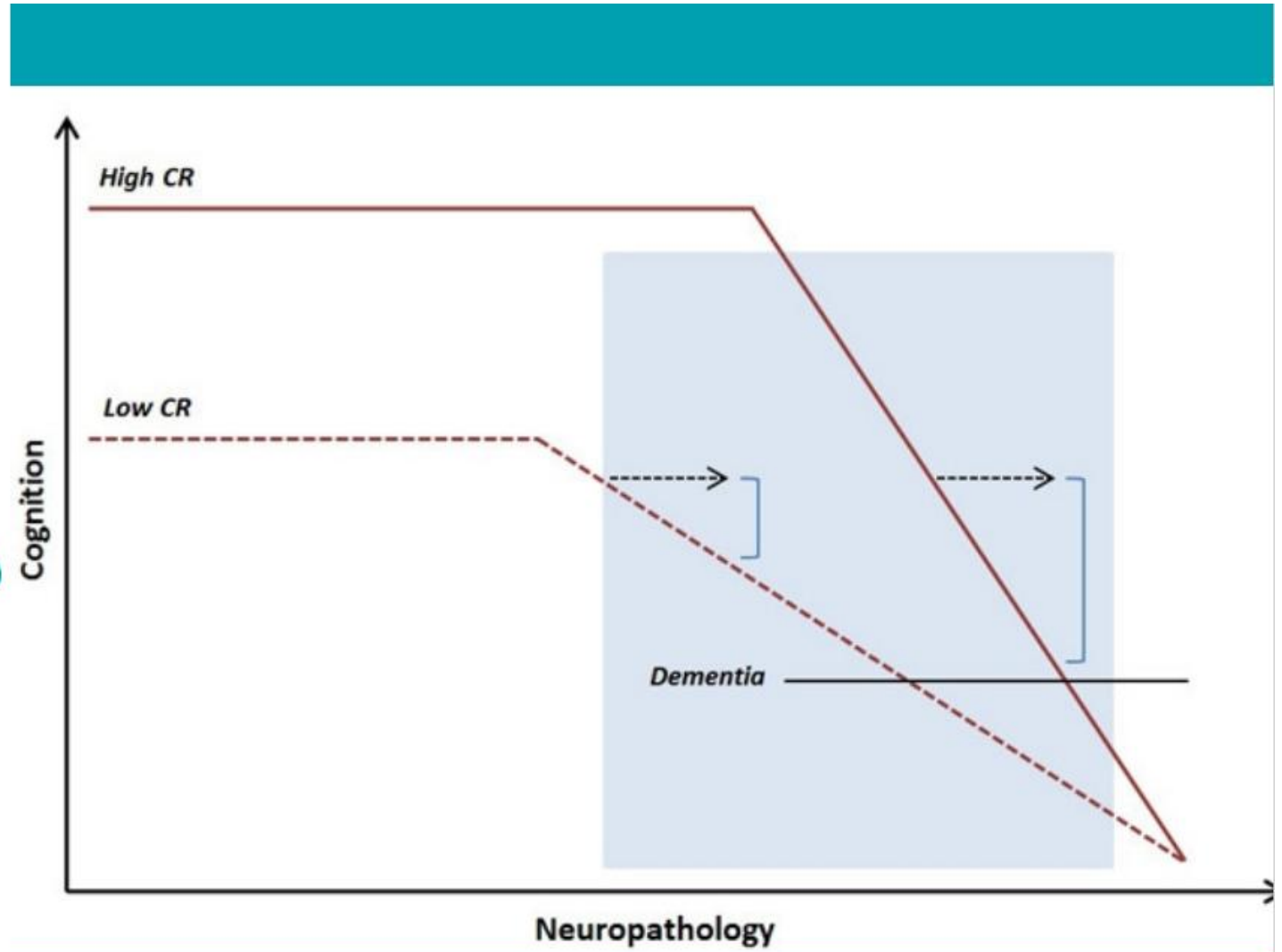
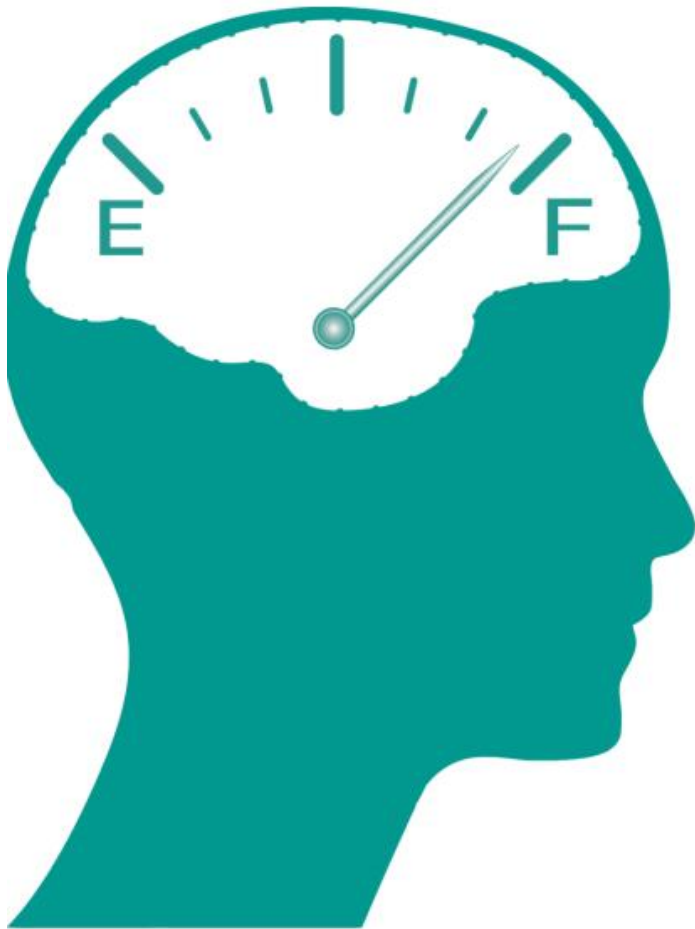


# Spectrum of Cognitive Concerns

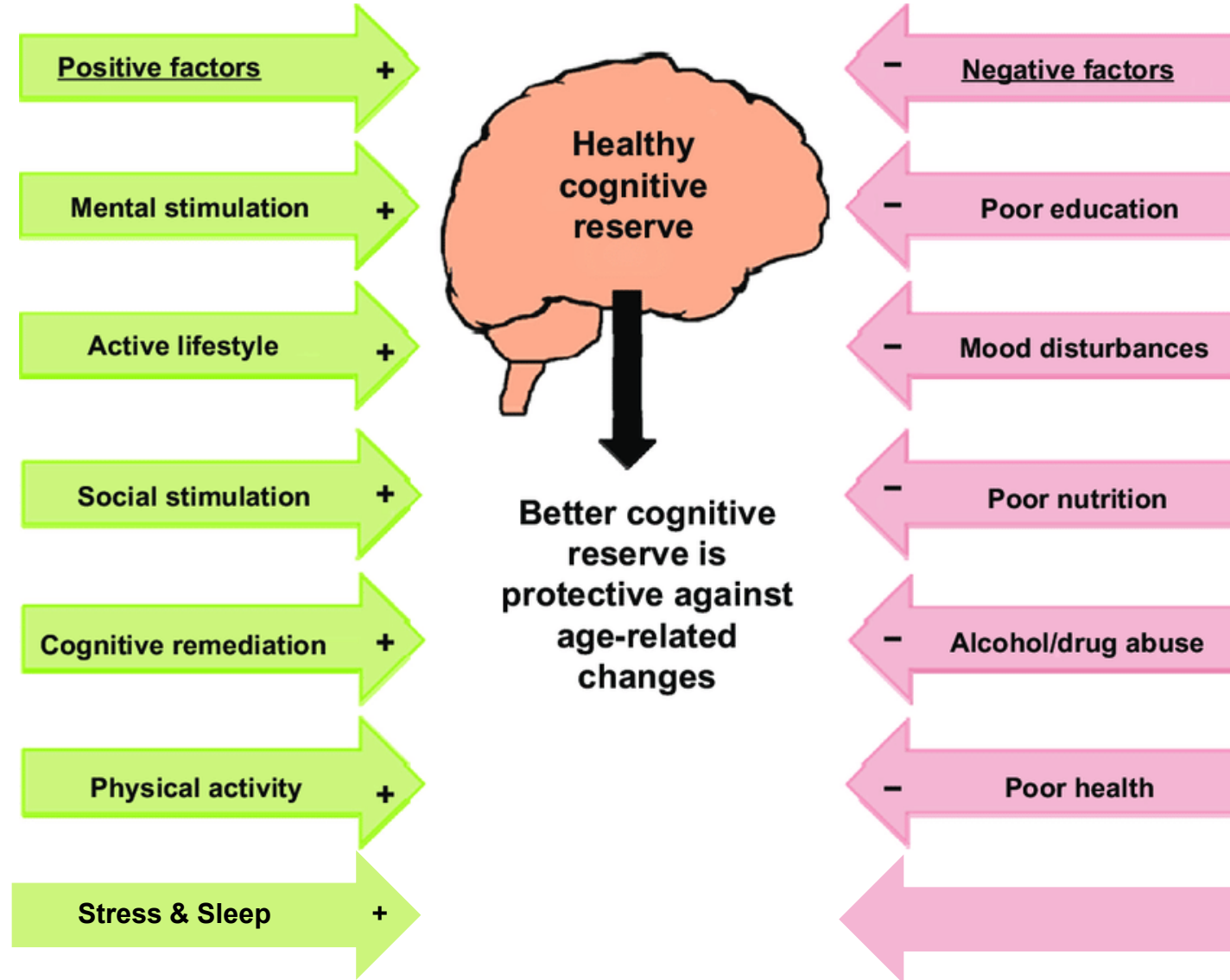


Also the "foggy brain" symptoms of cancer treatment, hormone imbalances, chronic stress...

# Cognitive Reserve



# Factors of Cognitive Reserve



# Stop Smoking

- Smoking increases risk of CVD and stroke by 2-4x
- Smokers have 30% higher risk of dementia and 1.45x higher odds of faster cognitive decline



# Guidelines

## Cardio

*150 – 300 minutes per week of moderate to vigorous aerobic exercise*

- ✓ Improvements in size & structure of cerebellum & basal ganglia.
- ✓ Improved blood flow.
- ✓ Reduces plaque formation.

*\*\*Choose the format that brings JOY!*

## Resistance

*Minimum of 2 sessions per week*

- ✓ Structural and functional improvements in frontal lobe.
- ✓ Reduces atrophy of white matter.
- ✓ Improves executive functioning and memory.
- ✓ Reduces fall risk, Improved blood flow, Releases immune factors

*\*\*Choose challenge!*

## Neuromotor (aka Dual Tasking, aka Multidomain Movement)

*150 - 300 minutes per week*

*(significant benefits seen at 52 hours)*

- ✓ Slow progression of cognitive decline in all domains more than single modality exercise.
- ✓ Release of endorphins, dopamine, serotonin, laughter, social element.

*\*\*Choose a VARIETY of modalities that bring challenge without excessive frustration*

**52 hours of exercise significantly and noticeably improves executive functioning and processing speed in older adults regardless of modality.**

# Dual Tasking Exercise Examples



# Our Brain Gym

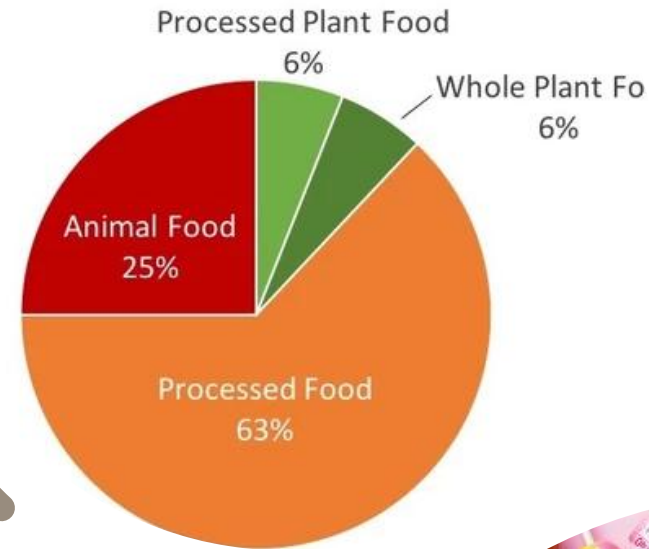


# Standard American Diet (SAD)





## Research Shows Over & Over Again:

- **SAD is a significant risk factor** for depression, anxiety, dementia and metabolic diseases.
- **Whole food diet (ie: NOT ultra processed) is significantly protective** for all of these conditions.

The Standard American Diet



# Minimize Ultra-Processed Foods

Unprocessed or minimally processed foods	Processed culinary ingredients	Processed foods	Ultra-processed foods
<p>Foods which did not undergo processing or underwent minimal processing techniques, such as fractionating, grinding, pasteurization and others.</p> 	<p>These are obtained from minimally processed foods and used to season, cook and create culinary dishes.</p> 	<p>These are unprocessed or minimally processed foods or culinary dishes which have been added processed culinary ingredients. They are necessarily industrialized.</p> 	<p>These are food products derived from foods or parts of foods, being added cosmetic food additives not used in culinary.</p> 
<p>Legumes, vegetables, fruits, starchy roots and tubers, grains, nuts, beef, eggs, chicken, milk</p>	<p>Salt, sugar, vegetable oils, butter and other fats.</p>	<p>Bottled vegetables or meat in salt solution, fruits in syrup or candied, bread, cheeses, purees or pastes.</p>	<p>Breast milk substitutes, infant formulas, cookies, ice cream, shakes, ready-to-eat meals, soft drinks and other sugary drinks, hamburgers, nuggets.</p>

# You've Heard of SPF, Now Get Your FPF!

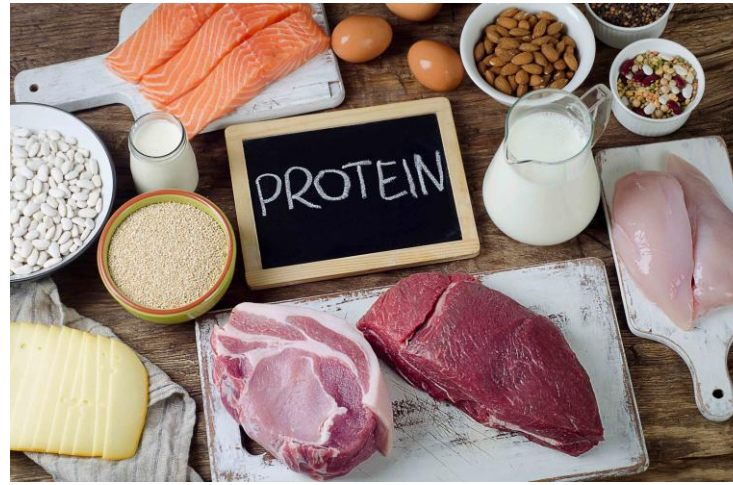
## Fiber

*25g per day minimum*



## Protein

*1.2-1.6 g/kg body weight per day*



## Fat

*0.6-1.5g/kg body weight per day*



## Focus Areas of Nutrition for Brain Health:

- Minimize inflammation
- Maximize nutrient absorption and usage
- Enhance gut health

# How can you remember these 5 healthy brain foods?



# What were they?

**Letter Association:** Avocados are my BFFS (blueberry, fish, flax, spinach)  
**Story:** “The circle (blueberry) of life is that you have to plant seeds (flax) to get the leaves (spinach) to get the fruit (avocado) that gets eaten by the animal (fish)”



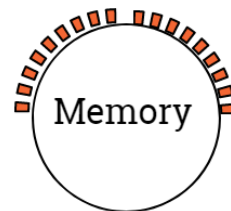
# Rest, Stress & Stimulation

## Focus Areas of Stimulation & Rest for Brain Health:

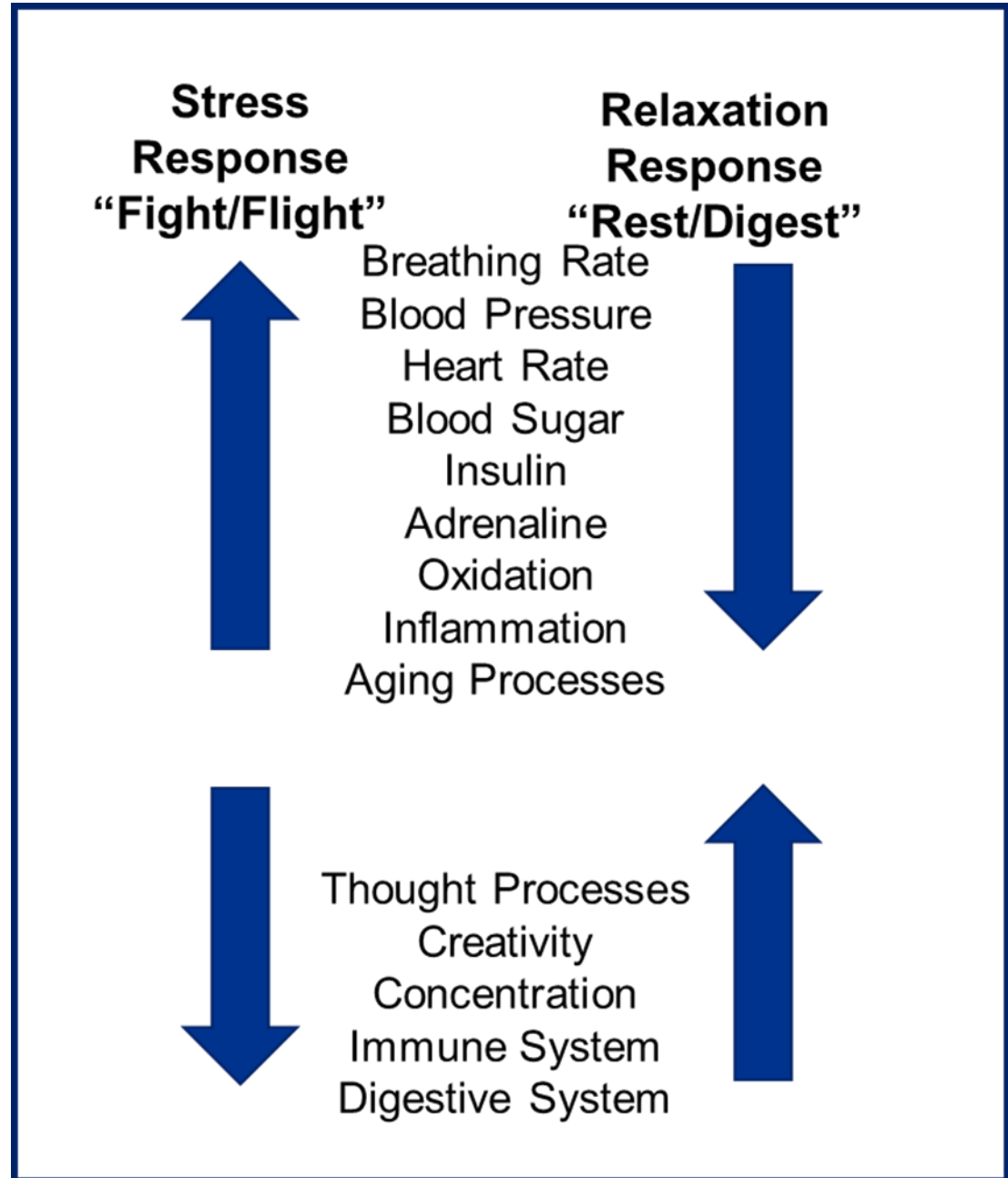
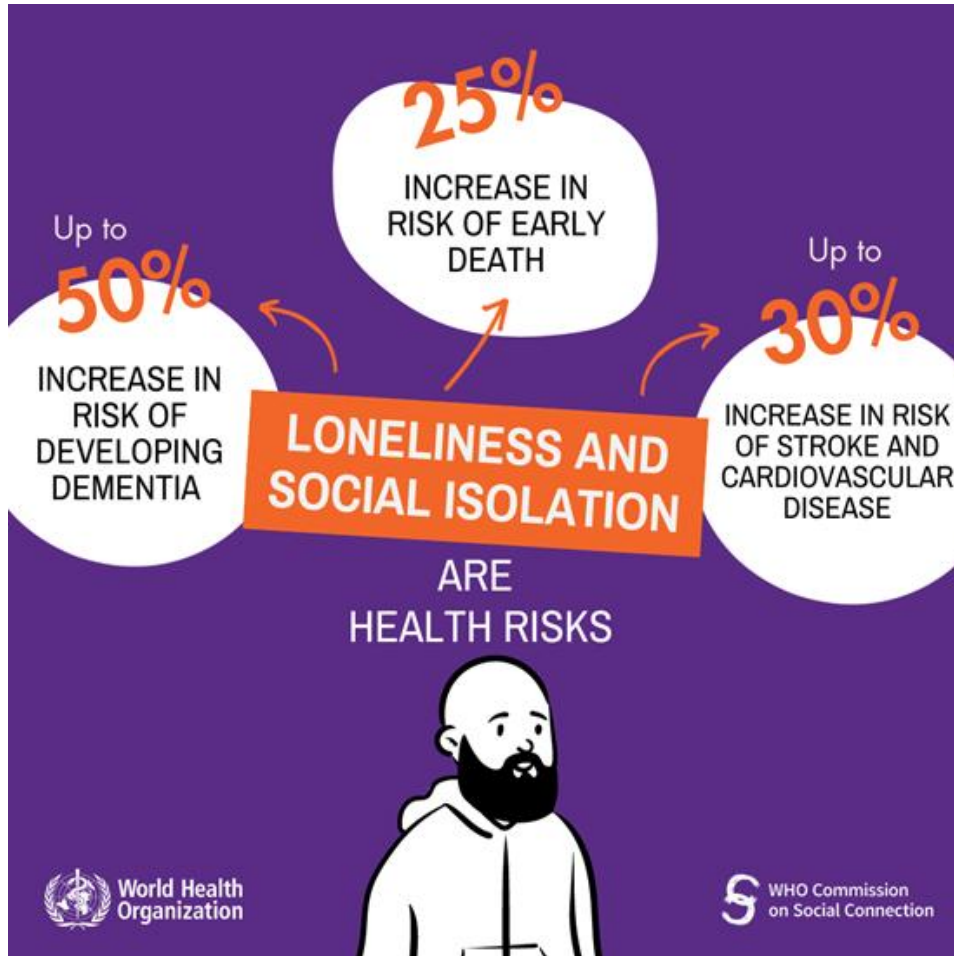
- Allow restorative pathways to function
- Minimize inflammation & plaque buildup
  - Stimulate neurogenesis
- Take advantage of cognitive domains with greater functioning
  - Build cognitive reserve



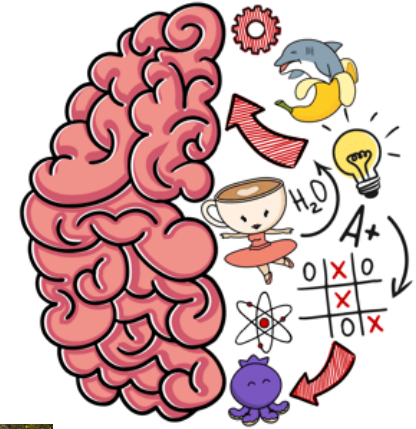
## The Cognitive Domain "Volume Knobs"



# Prioritize Stress Management, & Connection



# How to Connect: Socially & Cognitively



B I N G O				
6	29	34	47	75
2	26	41	59	73
3	25	FREE 8831 SPACE	57	64
11	27	31	46	68
15	21	37	48	71



# Strategies to Manage Acute Stress

1. Meditation & Breath Work (activates serotonin)
2. Yoga & Tai Chi (stabilizes mood through GABA)
3. Laughter (endorphin release)
4. Music (low dose dopamine release)
5. Massage or Hugging (oxytocin via tactile cue)

*Write one of these down that you can do daily.*



## 4-7-8 Breathing Exercise

**1** Breathe in for 4 seconds

Hold your breath for 7 seconds **2**

**3** Breathe out slowly for 8 seconds

Repeat at least 3x

This simple exercise activates the parasympathetic nervous system responsible for "rest and digest" which helps lower your heart rate and relax your internal organs.

*Mindful Productivity Blog*

# Sleep for Recovery

- **Sleep Systems:** problem solving, emotional regulation, creativity, immune function, waste removal, synaptic connections, cellular restructuring.
- **Sleep Deprivation:**
  - 2.5x more likely to suffer injury
  - 30% more likely to have insulin resistance
  - 27-35% more likely to have dementia
  - more likely to fall, suffer common cold & have CVD related mortality.
- **Poor sleep is a positive predictor of Alzheimer's. Sleep disturbances precede dementia and treating these sleep issues can delay MCI by years.**



# Sleep for Recovery



- **Sleep Thieves:**
  - Long/late naps
  - No natural sun exposure during the day
  - Inconsistent sleep/wake times
  - Screen time/stimulation before bed
  - Caffeine after 12/1pm
- **Train your brain with routines, including morning, before bed and midnight wakes.**
- **Some studies show LOW dose melatonin** can be helpful for those over the age of 65.
- **Magnesium glycinate or taurate** are also safe and can be effective for deeper sleep.

# How Was Your Cognition?

What are the 4 domains of cognition?

What is cognitive reserve?

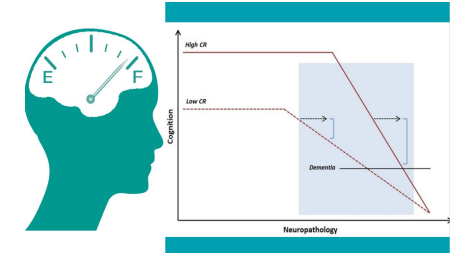
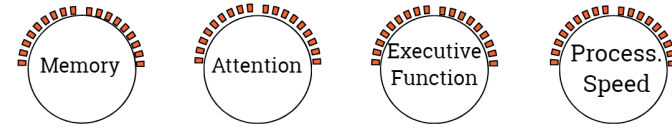
What are the 3 (chunked) types of fitness for brain health?

What are the 3 components to a balanced, brain-healthy meal?

What was your strategy to manage stress that you wrote down?

What is one strategy for healthy sleep from the visual?

The Cognitive Domain "Volume Knobs"



You've Heard of SPF, Now Get Your FPF!



# Creatine

**May enhance cognition with supplementation.**

- ✓ Creatine Monohydrate
- ✓ NSF or USP or Creapure certified
- ✓ 5-10g per day

Not for those with pre-existing kidney disease or those with daily NSAID use. Always discuss supplementation with your doctor.

# St. Jude Wellness Center

- Medical Fitness classes & trainers
- Yoga therapy & mind-body classes
- Dietitian consults & classes
- Massage therapy & facials
- Lots & lots & lots of education!

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**Virtual Cooking Class**  
**Wed 4/22 at 11am**  
**Free**

**Sound Bath**  
**Wed 4/22 at 5:30pm**  
**\$25**

**Brain Fit Masterseries**  
**Wed/Fri at 12:30pm**  
**5/6-6/12**  
**\$165**