BRAIN & MOOD BOOSTS: SUPPORTING OPTIMAL AGING

Thank you for your time to learn about the importance of Brain Boosts and Mood Boosts (exercises) that will guide your path to optimal aging. This quick resource guide will provide you with support to understanding your goals and provide knowledge how to incorporate Brain and Mood Boosters in your daily or weekly schedule.

BRAIN BOOSTS

Why do we need a brain boost (exercise) to promote optimal aging?

As we age, the brain undergoes natural changes. The benefits to daily brain boosts can promote problem solving, improve memory, maintain cognitive abilities, and reduce the risk of dementia. Just like our muscles, the brain benefits from regular exercise.

What brain structures benefit from brain boosts and how would I engage?

1. **Prefrontal Cortex**
   Function: Decision-making, planning, attention, working memory, self-control
   Why It Matters: This area helps you think clearly, stay organized, and focus.
   Exercises That Engage It:
   Puzzles, strategy games (like chess or Sudoku)
   Learning new skills
   Problem-solving tasks

2. **Hippocampus**
   Function: Memory formation, learning, spatial navigation
   Why It Matters: Vital for forming and recalling new memories—especially impacted in aging and Alzheimer's disease.
   Exercises That Engage It:
   Memory games, reading, learning a new language
   Trying new routes or environments

3. **Parietal Lobes**
   Function: Spatial awareness, sensory integration, math, and reading comprehension
   Why It Matters: Helps you understand space, numbers, and written language.
   Exercises That Engage It:
      Reading, number puzzles, writing
      Drawing or assembling things (like model kits or jigsaw puzzles)

4. **Temporal Lobes**
   Function: Auditory processing, language, long-term memory
   Why It Matters: Critical for communication and retaining knowledge.
   Exercises That Engage It:
      Listening to music, learning a new language, storytelling
      Playing an instrument or singing

5. **Occipital Lobe**
   Function: Visual processing
   Why It Matters: Important for interpreting and reacting to visual information.
   Exercises That Engage It:
      Visual memory games, puzzles with patterns, drawing

6. **Cerebellum**
   Function: Coordination, balance, motor learning, timing
   Why It Matters: Supports both physical and cognitive coordination.
   Exercises That Engage It:
      Dancing, tai chi, juggling, playing musical instruments

🌟 Keep your brain curious 🌟

Challenge yourself to try new things and incorporate daily brain boosts
Mix social time with mental exercise (games with friends!)
Stay physically active: movement improves brain health

MOOD BOOSTS

Why do we need a mood boost (exercise) to promote optimal aging?

Mental health is essential to overall wellness. Mood-boosting activities may help reduce anxiety and depression, increase resilience, and improve overall quality of life. Mental and emotional health are vital to aging well.
Boosting your mood can:

Reduce stress and anxiety
Improve sleep and memory
Strengthen relationships
Increase lifespan and well-being

What brain structures benefit from mood boosts and how would I engage?

1. **Amygdala**
   Function: Processes emotions (fear, anxiety, pleasure)
   Why It Matters: Overactivity is linked to anxiety and stress disorders
   Exercises That Engage It:
   Mood-boosting exercises (like aerobic activity) help regulate and calm the amygdala

2. **Hippocampus**
   Function: Memory formation and emotional regulation
   Why It Matters: Shrinks with chronic stress and aging
   Exercises That Engage It:
   Activities like exercise, mindfulness, and learning help preserve or even increase its volume

3. **Prefrontal Cortex**
   Function: Decision-making, attention, emotional control
   Why It Matters: Helps with rational thinking and managing impulses; Supports independence and adaptability in older adults
   Exercises That Engage It:
   Practices like meditation, social connection, and cognitive games

4. **Anterior Cingulate Cortex (ACC)**
   Function: Focus, empathy, emotion regulation
   Why It Matters: Helps you manage emotions and stay calm; Promotes mental flexibility and emotional resilience with aging
   Exercises That Engage It:
      Engaged during mindfulness, gratitude, and reflection

🌻 A positive mind supports a healthy mind. 🌻

Build a daily routine with uplifting activities
Connect regularly with friends or family
Spend time outdoors or near sunlight
Express yourself—through art, music, or writing

For additional information/references, feel free to review this information from the National Institute on Aging:

nia.nih.gov/sites/default/files/2025-01/what-is-brain-health.pdf
nia.nih.gov/health/healthy-aging/participating-activities-you-enjoy-you-age

Compiled by Dr. Michelle Gillitzer, DNP, AGPCNP, assistant professor of instruction, University of Iowa College of Nursing