# BOOST YOUR BRAINPOWER

Natural strategies to boost memory and clarity

by Jacob Teitelbaum, MD

If your brain feels a little bit slower these days, you're not alone. Like just about everything else, your brain goes through changes as you age. Those changes can make it harder to multitask or figure out the tip for a lunch out with friends.

Worse, those changes may cause worry about a greater slide into cognitive decline. That's not surprising because the lion's share of media attention and research focuses on dreaded conditions like Alzheimer's disease. Yet most of us are simply on a path of normal, healthy brain aging. Yes, we'll experience some subtle slow-downs and normal memory dips (where are those keys?), but we won't lose our brainpower or our sense of self.

Luckily, there are a lot of things you can do to keep your brain young, sharp, and quick no matter how old you are. All it takes is addressing the common issues that affect all of our brains as we age.

#### WHERE OLDER BRAINS SHINE

Some things get better with age, and that includes many of your brain's most important functions. For example, crystallized intelligencewhich includes skills and knowledge that are practiced and built over time—gradually improves as we age. In fact, in this area, older adults often outperform younger adults.

Some resilient mental abilities that get richer or remain stable with healthy brain aging include:

- Vocabulary
- Verbal fluency
- General knowledge
- Concentration
- Focus
- Facial and object recognition
- Wisdom

Plus, while overall memory may feel like it's slowing down, some forms don't. Those forms of memory include:

• Implicit: things you just know, like the Pledge of Allegiance

• Procedural: lifelong skills, like tying shoes and riding bikes

• Recognition: the ability to retrieve information, like answering questions about something that happened years ago

with your friends on Thursday

These forms of memory remain

# or the Happy Birthday song

## • Temporal order: remembering the time and sequence of events, like knowing you went to a movie and then to dinner

# sharp throughout your lifetime, sometimes becoming even clearer as you get older.

# **5 ACTIVITIES TO HELP KEEP YOU SHARP**

Scientists have identified some activities that super-sharp seniors tend to engage in. By taking part in some of these yourself, you can ensure more successful brain aging.

> The more you engage your brain, the happier it will be.





#### **NORMAL CHANGES TO** HEALTHY AGING BRAINS

Over time, many brain functions slow down, especially those related to processing speed and multi-tasking. We don't necessarily lose these skills; they just take longer than they did before. You may notice this when you struggle to remember something (like your neighbor's daughter's name) or try to do math in your head. These slight declines can feel frustrating, but they won't get in the way of living your best life—and they don't indicate that you're on the verge of cognitive decline. The vast majority of the over-65 crowd won't develop any cognition-depleting diseases.

But that doesn't mean the brain doesn't start to slow in some ways over time. Even the healthiest seniors experience gradual declines in specific brain functions, such as:

- Problem solving
- Learning and processing new information
- Reaction times
- Divided attention

You may also struggle with certain types of memory, including:

recalling things without

a prompt, like remembering what you need from the grocery store without a list

• Source memory, which means being able to remember where you learned

something

• Prospective memory, which involves remembering to do planned things or future activities like writing thank you notes or going to a dental appointment

Also, it is important to remember that it may take you longer to remember things, simply because you have much more information in your brain than a 10-year-old! Just like it takes a computer much longer to find certain files when it has 30 GB in memory vs 3 GB.

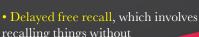
Luckily, for areas where you do have problems, there are things you can do to improve function, boost memory, and reclaim skills and speed.

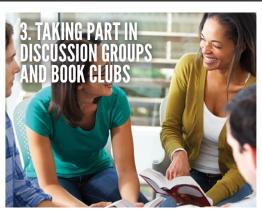
#### MANAGING A LIFETIME OF WEAR AND TEAR

Brain aging doesn't happen for no reason. In fact, scientists have uncovered clear causes for some of the normal slowdowns in older adults:

- Inflammation
- Oxidative stress
- Reduced circulation

The "big three" can make it harder for brain cells to survive and thrive over time. They all contribute to decreased production of new brain cells, cause damage to existing brain cells and the connections between them, and interfere with special proteins that help repair and maintain brain cells. Fortunately, a simple recipe of natural herbs, spices, and fats can help keep your brain sharp and your memory clear.









CURCUMIN is the most active compound in turmeric—a deep-golden spice that's been used to flavor foods and sharpen minds for generations. One of curcumin's key superpowers is its ability to act through several different pathways to calm inflammation in the brain. At the same time, it works as a potent antioxidant to reduce oxidative stress, which helps protect your precious brain cells.

Curcumin also helps improve blood flow, crucial for delivering oxygen and nutrients to your brain, and increases levels of a brain-protective protein called BDNF (brain-derived neurotrophic factor) that helps your brain cells survive and thrive. What's more, curcumin also sparks the production of fresh new brain cells (neurogenesis) to keep your brain young and healthy.

You can see the many ways curcumin affects your brain cells—and healthier brain cells come with noticeable benefits like improved memory. To give your brain a curcumin boost, look for a highly bioavailable form of curcumin such as BCM-95, also known as Curcugreen. This proprietary, clinically studied type of curcumin may help to keep your brain sharp as a tack. A revealing clinical trial showed that when healthy older adults took BCM-95 daily for one year, they experienced no cognitive decline, unlike those taking a placebo. And while BCM-95 alone can have a positive effect on brainpower, it works even better when combined with other super brain-boosters.

VITAMIN D is critical for good health, including brain health. Research shows that sufficient levels of the "sunshine vitamin" support the growth of new brain cells and can help keep depression at bay.

Preliminary studies also suggest that high doses of supplemental D may help prevent cognitive decline by reducing the

accumulation of abnormal proteins that are associated with dementia. An international research team conducted a study that observed over 1,600 seniors for six years. They found that those who were severely deficient in vitamin D were 125 percent more likely to develop Alzheimer's and dementia than those who had adequate levels. Even the participants who were mildly deficient had an increased risk of 53 percent.

The problem is, an estimated 75 percent of adults are deficient in this key nutrient. This is particularly true for people who live in northern climates or those who routinely use sunscreen or avoid sun exposure. Fortunately, it's easy to get your daily dose of this brain-protective vitamin by taking 2,000 IU of supplemental D.

### **ADD SOME OMEGAS**

Omega-3 fatty acids are crucial for brain function. In fact, your brain can't work at full capacity without two very important essential fatty acids, or EFAs—docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA). These EFAs reduce inflammation in the brain and help create new neurons. EFAs also boost critical communication between new and existing neurons, and help brain cells repair themselves.

Clinical trials show that people who supplement with omega-3s have better executive function, improved attention and mental flexibility, and delayed cognitive decline. They also typically perform better on verbal learning tests and memory tests.

To get the most benefit from your omega-3 supplement, look for bioidentical EFAs that are bound to phospholipids, which significantly

enhance absorption. Also, check the label for peptides not typically found in fish oil or krill oil that specifically improve brain function and focus. ROSEMARY has been linked with memory for centuries, dating all the way back to ancient Greece and Rome. This pungent herb contains dozens of potent plant chemicals, including powerful antioxidants and anti-inflammatory compounds that work to protect precious brain cells. Clinical studies have confirmed rosemary's brain benefits, showing that the herb boosts memory, increases circulation of oxygenated blood in the brain, prevents brain cell death, and improves sleep quality.

Rosemary also works synergistically with other herbs, including sage. In a double-blind, placebo-controlled, pilot trial, healthy older adults who took a mixed-herb extract of rosemary and sage (along with melissa) for just two weeks saw a substantial improvement in their verbal memory.

**SAGE**, another savory herb, also has strong ties to increased brainpower. Like rosemary, sage is packed full of healing plant compounds that combat inflammation and oxidative stress. Sage also increases levels of special proteins (called neurotrophins) that help brain cells survive and function optimally. At the same time, it decreases levels of a potentially damaging enzyme called acetylcholinesterase.

All of those healing effects help increase brainpower in several ways. Both animal and human studies show that supplementing with sage boosts cognition, attention, and memory—especially prospective memory. On top of that, simply inhaling the aroma brings positive mood- and brainboosting benefits. The herb has also been shown to delay, possibly even prevent, cognitive decline.



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