

The
BRAIN
BINGO
Challenge



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A 6-STEP

*Fun+New
Approach*

TO A HEALTHIER
BRAIN

WELCOME TO

Command CENTRAL

(your brain)

Weighing in at just three pounds, your brain has a massive 24/7 job.¹ It oversees, guides, and directs pretty much everything that happens in your body, like:

- ✓ ***Creating, maintaining, repairing, and operating your cells, tissues, and organs***
- ✓ ***Guiding your immune response, sleep-wake cycle, and your body's operating systems***
- ✓ ***Receiving and interpreting information from your five senses***
- ✓ ***Moving all of your body parts***

That's not even mentioning your thoughts, emotions, memories, and ability to create and learn.

WELCOME



It's no surprise that your brain is your most complex organ.

And it's also no surprise that keeping it healthy and fit is vital to your overall health and quality of life!

This ebook outlines **simple but powerful lifestyle changes** you can make **that can help keep your brain healthy** — and the rest of your body, too.

We've created a **Brain Bingo Challenge** to make it fun. You'll find it at the end of this guide.

We hope it inspires you to take care of your personal command central!



Julie x

e: julie@julieclarknutrition.co.uk
t: 07435650982



What is

BRAIN HEALTH?

Brain health is a huge topic because it affects nearly everything you do and every part of your life.

Here are just a few aspects of brain health that play a role in your everyday life:

COGNITIVE —> *Your ability to think, learn, and remember*

MOTOR —> *Your ability to make and control movements, including balance*

EMOTIONAL —> *Your ability to interpret and respond to emotions (both pleasant + unpleasant)*

TACTILE —> *Your ability to feel and respond to your “touch” sensations, like pain, temperature, and pressure.²*

WHAT IS BRAIN HEALTH

Many factors — including some outside of your control — can affect the health of your brain, like:

- *Getting older*
- *Injuries from a stroke or traumatic brain injury*
- *Mood disorders like depression or anxiety*
- *Substance use and/or addiction*
- *Diseases like Alzheimer's*

The great news is that you can make simple lifestyle upgrades now that can protect your brain's health for years to come.

Even better: the things that are good for your brain are also good for your overall health, happiness, and quality of life!





AGING AND *Your Brain*

It's a fact of getting older: your brain starts to shrink.³

It begins when you're in your 30s and 40s, and then by the time you hit your 60s, it starts shrinking even faster.

And just as our bodies start to look different as we get older (hello, wrinkles!), so does our brain.

This difference in your brain's appearance also signals a change in the way your brain functions.

AGING AND YOUR BRAIN

Brain Mass

While your overall brain volume (size) shrinks as you get older, it especially affects your frontal lobe and hippocampus. These are the areas responsible for cognitive functions.

Cortex

The outer layer of your brain gets thinner, which can mean fewer connections within your brain, slowing cognitive processing.

White Matter

This is a system of neural connections inside your brain that join your four brain lobes. It also shrinks with age, slowing your brain's processing speed and cognitive function.

Neurotransmitters

It's not just the structure of your brain that changes. As you get older, your brain starts to create different amounts of brain chemicals that can affect cognitive function.



AGING AND YOUR BRAIN



The bottom line: Normal brain aging may mean slower processing speeds and more trouble multitasking, according to the Centers for Disease Control.⁴

>> **But it's not all bad news, because routine memory, skills, and knowledge can remain strong — and may even IMPROVE with age!**

We saved the best news for last:



Up to 40% of dementia cases may be prevented or delayed through changes you make in your lifestyle, according to the CDC.⁵



6 Steps to a

HEALTHIER BRAIN

We've rounded up the most important actions to help keep your brain healthy.

On their own, each contributes to brain health. But combining them into a complete lifestyle makes them even more powerful.

A study by the National Institute on Aging found that a healthy lifestyle — including exercising, following a Mediterranean-style diet, challenging your brain, not drinking heavily, and not smoking — is linked with a lower risk of Alzheimer's.

According to the study — which followed almost 3,000 people — older adults who engaged in 4 or more of those activities had a **60% lower risk** when compared to those who followed none or one.⁶



STEP 1: COVER YOUR BASICS

Stay up-to-date with health screenings.

Many chronic health problems – like high blood pressure, depression, diabetes, and high cholesterol – can sneak up on you and affect your brain health, not to mention the health of your entire body.

Even worse, you can have those problems without knowing it!

This is just one reason getting regular check-ups is a good idea.

If you find out you do have a chronic health issue, make sure you continue to see your provider for regular monitoring.²

Limit alcohol use.

Drinking can affect how your brain looks and functions, and it can disrupt your communication pathways.

Plus, it hijacks your brain's ability to control your speech, memory, and balance.

Over time, it can change your neurons, including making them smaller.⁷



6 STEPS TO A HEALTHIER BRAIN

Stop smoking.

Right out of the gate, smoking affects your brain by causing an addiction that's hard to quit.

When you smoke, nicotine can mimic neurotransmitters in your brain...

And once your brain has access to the fake neurotransmitters, your body creates less of the real ones.

So, if you try to quit smoking or using other nicotine-containing products, you can get cravings and withdrawal symptoms.

Plus, nicotine activates the pleasure centers in your brain, which makes you associate nicotine with feeling good.

Over the long term, smoking can shrink the size of your brain, plus it's linked with Alzheimer's disease, cognitive decline, and a higher risk of stroke and cancer.





STEP 2: EXERCISE REGULARLY

Being active and exercising regularly are two of the BEST things you can do for your brain.

That's because when you work out, you increase blood flow to your brain, which may help offset some of the natural loss of connections that happen as you get older.⁹

Plus, exercise helps stimulate your brain to create more chemicals that affect the growth of new blood vessels, and it also helps keep your new and existing brain cells healthy.

That brain shrinkage we mentioned earlier?

Many studies have suggested that the parts of the brain that control thinking and memory are BIGGER in people who exercise than in people who don't.

And... when you exercise, you often sleep better and are in a better mood, both of which play a role in brain health (more on that in a bit!).¹⁰

Many studies have found that active people are less likely to experience a decline in their mental function, as well as a lower risk of Alzheimer's.⁹

How much exercise should you get?

The NHS recommends getting at least 150 minutes of moderate-intensity exercise a week or 75 minutes of vigorous-intensity exercise⁷ (or a combo of both).

Also recommended: at least two strength training sessions a week. If you're 65 or older, add balance exercises three times a week.¹¹

6 STEPS TO A HEALTHIER BRAIN



STEP 3: EAT A BRAIN-HEALTHY DIET

This one is so important we've broken it into two parts.

Part 1: Manage your blood sugar.

When you understand the basics of how your brain operates, you can see why your blood sugar levels play such a giant role!

As your Command Central, your brain is made of nerve cells that operate and control pretty much everything in your body.

Your brain is also your most energy-demanding organ.

The energy that it uses to power all of its operations is... surprise... sugar! More specifically, a form of sugar called glucose.

Your brain uses HALF of all the sugar energy in your body!¹²



As you can imagine, fluctuating blood sugar levels play a big role in your brain's ability to do its job and also its long-term health.

Over time, high or low blood sugar levels can affect your brain's nerves and blood vessels, causing problems with memory, hormones, mood, and focus.

It's also linked with Alzheimer's disease and cognitive decline.¹³

All the more incentive to know your blood sugar numbers!



6 STEPS TO A HEALTHIER BRAIN

Part 2: Eat a healthy diet.

Diet plays a big role in brain health, but exactly how it does that is still a big area of research.¹⁵

- Some foods – like highly processed junk foods – may raise blood sugar and cause disease-creating oxidative stress and inflammation
- Meanwhile, some foods contain nutrients like antioxidants and omega-3 fatty acids that protect the brain because of their anti-inflammatory powers
- Some foods may help improve the gut-brain connection, which is an expanding area of research

For specific brain-healthy diets, experts recommend eating whole grains, lots of fruits and veggies, legumes, lean proteins, and healthy fats (especially olive oil) including cold-water fish.¹⁵

For personal recommendations check with a nutrition coach, dietitian, or your healthcare provider.



5 Brain Power Foods



✓ **FATTY FISH**

Fatty fish that's low in mercury – like salmon, canned light tuna, pollack, and cod – is high in omega-3 fatty acids, which appear to help fight Alzheimer's. Not a fan of fish? Try flaxseeds, walnuts, or avocados.

✓ **LEAFY GREENS**

Leafy green veggies like spinach, broccoli, kale, and collards are loaded with nutrients like folate, lutein, beta-carotene, and vitamin K, which are linked with a slower rate of cognitive decline.

✓ **BERRIES**

Berries (blueberries, strawberries, blackberries, and raspberries) are packed with brain-friendly antioxidants and flavonoids, which can help improve memory.

✓ **WALNUTS**

Walnuts are high in the omega-3 fatty acid called alpha-linolenic acid, which is linked with lower blood pressure and healthier arteries. Plus, in one study people who ate walnuts linked them with higher cognitive test scores.

✓ **TEA AND COFFEE**

Tea and coffee contain caffeine, which is linked with better performance on tests measuring mental function. Both also contain brain-friendly compounds like antioxidants.



STEP 4: GET PLENTY OF SLEEP

A major study found that people who slept six hours or less a night when they were in their 50s and 60s were more likely to develop dementia later.¹⁶

According to the NHS, **one-third of all adults don't get the recommended amount of sleep.**¹⁵

There's no doubt that sleep is critical to your brain health — but researchers are still uncovering exactly how and why sleep is so important.

This much is clear: when you don't get enough sleep, your brain struggles to create or maintain the pathways that help you learn new things and make new memories.¹⁷

Plus, it can slow down your brain and make it harder for you to concentrate.

Your brain is busy when you're sleeping.

While you are cycling through the different sleep stages, your brain goes into major housekeeping mode, repairing, restoring, and rejuvenating.

Plus, it's busy sweeping out toxins that build up during the day while you are awake.

Aim for seven to eight consecutive hours of sleep per night.

If sleeping is an issue for you, make sure you mention it to your healthcare provider.

6 STEPS TO A HEALTHIER BRAIN



STEP 5: STAY MENTALLY AND SOCIALLY ACTIVE

Your brain is similar to a muscle — you need to use it to keep it in shape!

How? Continue to learn new things, try new activities, and engage with the world.¹⁸

Important: Be aware of what you're feeding your brain!

When people who are middle-aged and older are shown negative stereotypes about aging and memory — they do worse on memory tasks.

And on the flip side, they do BETTER when shown positive images.

Next, let's talk about the importance of being socially engaged.

Being around others can help prevent depression and stress, which are linked with memory loss.

6 STEPS TO A HEALTHIER BRAIN

Studies have linked social isolation with brain atrophy, and experts think that being socially active may counteract that.¹⁸

When it comes to mental engagement, the more active you keep your brain, the better your memory — and for even BETTER results, challenge it in lots of different ways.¹⁹

Here's a quick list to get you started:

- *Do a daily puzzle or the crossword*
- *Solve math problems using your brain and a pencil + paper*
- *Read more*
- *Try meditation*
- *Learn a new language or musical instrument*
- *Play bridge, chess, or computer games*
- *Take up a new interest or skill (oh, and gardening is good for the brain!)*





STEP 6: MANAGE STRESS

Some stress is good — like the kind that inspires you to take action, or the stress that comes with new relationships and taking on new challenges.

But chronic stress can take a real toll on your brain.²⁰

Here's why: your brain has many parts that work together to do different things.



For example, if you're super stressed, the survival center of your brain (aka your amygdala) may suck up most of the energy — leaving other parts with less fuel to do their jobs.

Over time the stress can change how your brain is wired so that your survival center gets more focus than areas in charge of memories or learning.

Chronic stress can affect your memory AND increase your risk of dementia or Alzheimer's.

Some of the best ways to naturally manage stress — like exercise, sleep, and nourishing your body with healthy foods — are also really good for your brain.



Brain Bingo CHALLENGE



Now that we've outlined the best actions you can take to keep your brain healthy, it's time to put them into action!

Enter... your Brain Bingo Challenge!

I've created a brain bingo card filled with fun and challenging activities linked with better brain health.

You'll notice that every block on your Brain Bingo Card has its own activity.

Every time you complete an activity, put a giant X in its block!

Your goal: This depends on you!

BRAIN BINGO CHALLENGE

A great start: Print 1 Brain Bingo card and aim to reach “BINGO” (filling in a complete row or column) in one week.

Even better: **Every week** this month, print out a new copy of your Brain Bingo Card and reach BINGO — and feel the difference it makes in your energy, focus, and results!

What do you win?

This is the fun part. Plan a reward ahead of time - something that’s aligned with your goals!





BRAIN BINGO



Card

Print out your Brain Bingo Card and fill in each block as you complete the activity it contains.

Your goal: Reach BINGO (filling in a complete row or column) during the next week.

GO FOR A 30-MINUTE WALK	PREPARE AND EAT A MEAL WITH OMEGA-3 RICH FOODS (LIKE SALMON)	SOLVE A CROSSWORD PUZZLE	SLEEP FOR AT LEAST 7 HOURS	MAKE AN APPOINTMENT TO KNOW YOUR NUMBERS (BP, BLOOD SUGAR, AND CHOLESTEROL)
AVOID ADDED SUGARS FOR AN ENTIRE DAY	DO A 15-MINUTE STRENGTH WORKOUT	EAT A SNACK OF FRESH BLUEBERRIES OR A SQUARE OF DARK CHOCOLATE	CREATE: SKETCH, PAINT, OR MAKE A PIECE OF ART	TRY A MEDITATION APP FOR 5-10 MINUTES
JOURNAL ABOUT YOUR DAY FOR 15 MINUTES	LIST 10 THINGS YOU'RE GRATEFUL FOR	STAND ON ONE FOOT FOR 30-60 SECONDS, EACH SIDE	EAT A SALAD RICH IN LEAFY GREENS LIKE KALE AND SPINACH	COMPLETE A SUDOKU PUZZLE
READ 15 PAGES OF A BOOK	TRY A YOGA OR TAI CHI CLASS	SPEND 20 MINUTES IN NATURE	DO A 20-MINUTE CARDIO WORKOUT	EAT A HANDFUL OF RAW UNSALTED WALNUTS
LIMIT NON-WORK SCREEN TIME TO 1 HOUR	PRACTICE A MUSICAL INSTRUMENT FOR 20 MINUTES	SOCIALIZE WITH FAMILY OR FRIENDS	SPEND 5 MINUTES IN SILENCE	MEMORIZE A TIKTOK OR LINE DANCE

References

1. <https://www.ninds.nih.gov/health-information/public-education/brain-basics/brain-basics-know-your-brain>
2. <https://www.nia.nih.gov/health/brain-health/cognitive-health-and-older-adults>
3. <https://www.publichealth.columbia.edu/news/changes-occur-aging-brain-what-happens-when-we-get-older>
4. <https://www.cdc.gov/aging/publications/features/dementia-not-normal-aging.html>
5. <https://www.cdc.gov/aging/olderadultsandhealthyaging/maintainng-your-brain-health.html>
6. <https://www.nia.nih.gov/health/brain-health/how-aging-brain-affects-thinking>
7. <https://www.niaaa.nih.gov/publications/alcohol-and-brain-overview>
8. <https://www.healthline.com/health/smoking/smoking-effects-on-brain>
9. <https://www.mayoclinichealthsystem.org/hometown-health/speaking-of-health/5-tips-to-keep-your-brain-healthy>
10. <https://www.health.harvard.edu/mind-and-mood/exercise-can-boost-your-memory-and-thinking-skills>
11. <https://www.cdc.gov/nccdphp/dnpao/features/physical-activity-brain-health/index.html>
12. <https://hms.harvard.edu/news-events/publications-archive/brain/sugar-brain>
13. <https://www.cdc.gov/diabetes/library/features/diabetes-and-your-brain.html>
14. <https://www.health.harvard.edu/healthbeat/foods-linked-to-better-brainpower>
15. <https://www.nia.nih.gov/health/alzheimers-and-dementia/what-do-we-know-about-diet-and-prevention-alzheimers-disease>
16. <https://www.nih.gov/news-events/nih-research-matters/lack-sleep-middle-age-may-increase-dementia-risk>
17. <https://www.ninds.nih.gov/health-information/public-education/brain-basics/brain-basics-understanding-sleep>
18. <https://www.health.harvard.edu/mind-and-mood/6-simple-steps-to-keep-your-mind-sharp-at-any-age>
19. <https://www.nidirect.gov.uk/articles/staying-mentally-active>
20. <https://www.health.harvard.edu/mind-and-mood/protect-your-brain-from-stress>