Boost Your Brain Power
Foreword

Welcome to this Boost Your Brain Power guide by McCarthy & Stone which is written for older people who are planning a long, healthy and happy life ahead.

I hope you will find it useful and encouraging – the information included shows lots of different ways in which older people can take a positive approach to looking after their emotional and physical health, so as to enjoy life and keep active.

Please feel free to share the hints and tips with your friends and neighbours so that they too can maximise their well-being and maintain independence for years to come.

Catharine Jenkins
Senior Nurse Lecturer
Birmingham City University

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Introduction

Studies show that mental decline is not an inevitable part of ageing. Like anything else, using your brain will make it work best and there’s some truth in the saying ‘use it or lose it’. It’s a question of keeping your mind in trim to retain your mental abilities. Keeping yourself mentally, as well as physically fit, will make you feel better, improve brain power – and help you to stay independent for longer.

They say that you ‘can’t teach an old dog new tricks’; but when it comes to the brain, scientists have discovered that this old adage simply isn’t true. The human brain has an astonishing ability to adapt and change – even into old age. This ability is known as neuroplasticity. With the right stimulation, your brain can form new neural pathways, alter existing connections, and adapt and react in ever changing ways.

The brain’s incredible ability to reshape itself holds true when it comes to learning and memory. You can harness the natural power of neuroplasticity to increase your cognitive abilities, enhance your ability to learn new information and improve your memory.
Physiologists have known for many years that mind and body are linked. Not only can positive attitudes affect our mental wellbeing, they can also help to keep us physically healthy. A positive attitude towards ageing has shown to have many benefits such as better memory, more confidence and a greater ability to deal with the stress that can cause heart problems. In fact, some studies have found that those with a positive mental attitude had better general health and tended to live an average of seven and a half years longer than older individuals with negative age beliefs.

Many false beliefs about ageing exist, for example, it is widely believed that everybody loses their memory when they get older, when in fact many people retain or improve certain types of memory, such as for events or words. Not all thinking skills decline with age, abilities like vocabulary and general knowledge hold up well as we grow older.

Don’t give in to fatalistic thinking about ageing – research shows that genetics accounts only for a quarter of what determines life expectancy, meaning that three-quarters is controlled by factors that are under your control, such as nutrition, lifestyle and attitude towards ageing.
Stay Connected

When you think of ways to improve memory, do you think of ‘serious’ activities such as wrestling with a cryptic crossword or mastering chess strategy? Or do more lighthearted pastimes like spending time with friends or watching a funny movie spring to mind? For most people, it’s probably the former. But countless studies show that a life that’s full of friends and fun comes with cognitive benefits.

Humans are highly social animals. We’re not meant to survive, let alone thrive, in isolation. Relationships stimulate our brains – in fact, interacting with others may be the best kind of brain exercise. Research shows that having meaningful relationships and a strong support system are vital not only to emotional health, but also to brain health.

One of the greatest challenges of ageing is how your support network changes. Staying connected isn’t always easy as you grow older—even for those who have always had an active social life. Career changes, retirement, illness, death, and moves out of the local area can take away close friends and family members. The good news is that there are lots of ways to be with other people. It doesn’t matter what you do, so long as you get out of the house (if possible) and socialise:

- **Connect regularly with friends and family.** Spend time with people you enjoy and who make you feel upbeat. It may be a neighbor who you like to exercise with, a lunch date with an old friend, or shopping with your children. Even if you are not close by, call or email frequently to keep relationships fresh.

- **Make an effort to make new friends.** As you lose people in your circle, it is vital to make new connections so your circle doesn’t dwindle. Make it a point to befriend people who are younger than you. Younger friends can re-energise you and help you see life from a fresh perspective.

- **Spend time with at least one person every day.** Whatever your living or work situation, you shouldn’t be alone day after day. Phone or email contact is not a replacement for spending time with other people. Regular face-to-face contact can help you ward off depression and stay positive.

- **Volunteer.** Giving back to the community is a wonderful way to strengthen social bonds and meet others and the meaning and purpose you find in helping others will enrich and expand your life. Volunteering is a natural way to meet others interested in similar activities or who share similar values. Even if your mobility becomes limited, you can get involved by volunteering on the phone.

- **Find support groups in times of change.** If you or a loved one are coping with a serious illness or recent loss, it can be very helpful to participate in a support group with others undergoing the same challenges.
Give Your Brain A Workout

By the time you've reached adulthood, your brain has developed millions of neural pathways that help you process information quickly, solve familiar problems, and execute familiar tasks with a minimum of mental effort. But if you always stick to these well-worn paths, you aren't giving your brain the stimulation it needs to keep growing and developing. You have to shake things up from time to time!

Memory, like muscular strength, requires you to “use it or lose it.” The more you work out your brain, the better you’ll be able to process and remember information. The best brain exercising activities break your routine and challenge you to use and develop new brain pathways. Activities that require using your hands are a great way to exercise your brain. Playing a musical instrument, juggling, enjoying a game of table tennis, making pottery, knitting, or needlework are activities that exercise the brain by challenging hand-eye coordination, spatial-temporal reasoning, and creativity.

The brain exercising activity you choose can be virtually anything, so long as it meets the following three criteria:

1. **It's new.** No matter how intellectually demanding the activity, if it's something you’re already good at, it's not a good brain exercise. The activity needs to be something that's unfamiliar and out of your comfort zone. It can be something simple that doesn't involve other people, like knitting or playing word games. Or, better yet, make new acquaintances by checking out what's happening in your local area and finding a class that piques your interest. Even small changes like using your non dominant hand for tasks such as brushing your teeth; or taking a different route to the shops will help exercise those brain synapses.

2. **It's challenging.** Anything that takes some mental effort and expands your knowledge will work. If you’re planning a trip abroad, consider learning the language of the country you are visiting. If you're hoping to spend more time with the grandchildren, explore ways to get more involved in their lives – maybe it's learning to use a new piece of technology. Activities that challenge your brain on many levels, such as learning how to play a musical instrument or speak a new language, provide great stimulation. So do games like chess and bridge that require you to strategize and interact socially at the same time.

3. **It's fun.** Physical and emotional enjoyment is important in the brain’s learning process. The more interested and engaged you are in the activity, the more likely you’ll be to continue doing it and the greater the benefits you’ll experience. The activity should be challenging, yes, it should also be something that is fun and enjoyable to you.
Exercise

It has long been understood that the mind and body are interconnected. What benefits the body, will benefit the brain. Many adults don’t exercise as they get older. However, exercise is vital for staying healthy throughout life. It helps you maintain your strength and agility, gives your mental health a boost, and can even help diminish chronic pain. Whether you are generally healthy or are coping with an ongoing injury, disability, or health problem, regular exercise will help you stay physically and mentally healthy and improve your confidence and outlook on life.

- Check with your doctor before starting any exercise program. Find out if any health conditions or medications you take affect what exercise you should choose.

- Find an activity you like and that motivates you to continue. You may want to exercise in a group, like in a sport or class, or prefer a more individual exercise like swimming.

- Start slow. If you are new to exercise, a few minutes a day puts you well on the way towards building a healthy habit. Slowly increase the time and intensity to avoid injury.

- Walking is a wonderful way to start exercising. Exercise doesn’t have to mean strenuous activity or time at the gym. In fact, walking is one of the best ways to stay fit. Best of all, it doesn’t require any equipment or experience and you can do it anywhere. Studies show that even 30 minutes of brisk walking daily can improve blood flow to the brain, boosting neural growth factors and brain connectivity, perhaps as much as mental training does.
Lifestyle

It's important to be aware of ways that your health, environment, and lifestyle may contribute to memory loss.

The detrimental health effects that can occur from drinking and smoking, caused by alcohol and tobacco, are now well known. But beyond producing ailments such as cirrhosis of the liver and lung cancer, overindulgence in these common substances can permanently damage your ability to think clearly and remember everyday life.

**Don't smoke.** Smoking heightens the risk of vascular disorders that can cause stroke and constrict arteries that deliver oxygen to the brain. Smoking a pack of cigarettes a day exposes you to 1,000 micrograms of toluene (among other things), which can cause headaches, confusion and affect your ability to think clearly.

**Drink in moderation.** Having a few beers or glasses of wine several times a week can begin to interfere with your ability to remember. Alcohol destroys brain tissue and interferes with the process of absorbing information so that it never enters long-term memory. This type of memory loss means a person has difficulty remembering new information, so the learning process takes longer. It also reduces a person’s higher-level thinking (the ability to think in abstract terms).

So if a better memory is your goal, you would do well to examine your alcohol consumption patterns. And if you regularly have more than one (if you’re a woman) or two (if you’re a man) drinks a day or occasionally consume several drinks in a sitting, you may want to cut back to protect your thinking cap.

**Reduce stress.** Stress is one of the brain’s worst enemies. Cortisol, the stress hormone, damages the brain over time and can lead to memory problems. But even before that happens, stress or anxiety can cause memory difficulties in the moment. When you’re stressed out or anxious, you’re more likely to suffer memory lapses and have trouble learning and concentrating.

There are many healthy ways to manage and cope with stress, but they all require change. You can either change the situation or change your reaction. Since everyone has a unique response to stress, there is no “one size fits all” solution to managing it. No single method works for everyone or in every situation, so experiment with different techniques and strategies. Focus on what makes you feel calm and in control. Practicing relaxation techniques such as deep breathing, walking in the fresh air, meditation, rhythmic exercise, and yoga can help reduce everyday stress and boost your energy and mood.
Sometimes, even what looks like significant memory loss can be caused by treatable conditions and reversible external factors.

- **Side effects of medication.** Many prescribed and over-the-counter drugs or combinations of drugs can cause cognitive problems and memory loss as a side effect. This is especially common in older adults because they break down and absorb medication more slowly. Common medications that affect memory and brain function include sleeping pills, antihistamines, blood pressure and arthritis medication, muscle relaxants, anticholinergic drugs for urinary incontinence and gastrointestinal discomfort, antidepressants, anti-anxiety meds, and painkillers. **Do not** stop taking any prescribed medication before consulting with your doctor.

- **Depression.** Depression can mimic the signs of memory loss, making it hard for you to concentrate, stay organized, remember things, and get stuff done. Depression is a common problem in older adults—especially if you’re less social and active than you used to be or you’ve recently experienced a number of important losses or major life changes (retirement, a serious medical diagnosis, the loss of a loved one, moving out of your home).

- **Vitamin B12 deficiency.** Vitamin B12 protects neurons and is vital to healthy brain functioning. In fact, a lack of B12 can cause permanent damage to the brain. Older people have a slower nutritional absorption rate, which can make it difficult for you to get the B12 your mind and body need. If you smoke or drink, you may be at particular risk. If you address a vitamin B12 deficiency early, you can reverse the associated memory problems. Treatment is available in the form of a monthly injection.

- **Thyroid problems.** The thyroid gland controls metabolism: if your metabolism is too fast, you may feel confused, and if it’s too slow, you can feel sluggish and depressed. Thyroid problems can cause memory problems such as forgetfulness and difficulty concentrating. Medication can reverse the symptoms.

- **Dehydration.** Older adults are particularly susceptible to dehydration. Severe dehydration can cause confusion, drowsiness, memory loss, and other symptoms that look like dementia. It’s important to stay hydrated (aim for 6-8 drinks per day). Be particularly vigilant if you take diuretics or laxatives or suffer from diabetes, high blood sugar, or diarrhoea.

If any of these are a concern to you please consult your GP.

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Sleep

When you’re sleep deprived, your brain can’t operate at full capacity. Creativity, problem-solving abilities and critical thinking skills are compromised. But sleep is critical to learning and memory in an even more fundamental way. Research shows that sleep is necessary for memory consolidation, with the key memory-enhancing activity occurring during the deepest stages of sleep.

Many adults complain of sleep problems as they age, including insomnia, daytime sleepiness, and frequent waking during the night. But getting older doesn’t automatically bring sleep problems. Poor sleep habits are often the main causes of low-quality sleep in adults over 50.

• **Naturally boost your melatonin levels at night.** Artificial lights at night can suppress your body’s production of melatonin, the hormone that makes you sleepy. Use low-wattage bulbs where safe to do so, and turn off the TV and computer at least one hour before bed.

• **Make sure your bedroom is quiet, dark, and cool,** and your bed is comfortable. Noise, light, and heat can interfere with sleep. Try using an eye mask to help block out light.

• **Develop bedtime rituals.** A soothing ritual, like taking a bath or playing music will help you wind down.

• **Go to bed earlier.** Adjust your bedtime to match when you feel tired, even if that’s earlier than it used to be.

If this is of concern to you please consult your GP.
You Are What You Eat

Recent evidence suggests that good nutrition is essential for our mental health; the brain requires nutrients just like our heart, lungs or muscles do. A healthy, balanced diet can boost brainpower and increase feelings of wellbeing.

1. **Wholegrain** - like everything else in your body, the brain cannot work without energy. The ability to concentrate and focus comes from the adequate, steady supply of glucose in our blood to our brain. Wholegrains with a low GI release glucose slowly into the bloodstream, keeping you mentally alert throughout the day. Opt for ‘brown’ cereals, wheatbran, wholemeal or granary bread and brown pasta.

2. **Oily Fish** - essential fatty acids (EFAs) are good for healthy brain function, the heart, joints and general wellbeing but they cannot be made by the body and must be obtained through diet. The most effective omega-3 fats occur naturally in oily fish such as salmon, trout, mackerel, herring, sardines, pilchards and kippers. Try to include 2-4 portions a week. If buying tinned fish, choose varieties in water, brine or tomato sauce rather than in sunflower oil. If you don’t like fish, other good sources include linseed (flaxseed) oil, soya bean oil, pumpkin seeds, walnut oil and soya beans.

3. **Blueberries** - Evidence suggests that the consumption of blueberries may be effective in improving or delaying short term memory loss. Generally, you should aim to eat at least five portions of fruit and vegetables a day.

4. **Eat more tomatoes** - There is good evidence to suggest that lycopene, a powerful antioxidant found in tomatoes, could help protect against the kind of free radical damage to cells which occurs in the development of dementia, particularly Alzheimer’s.

5. **B Vitamins** - Certain B vitamins – B6, B12 and folic acid – are known to reduce levels of homocysteine in the blood. Elevated levels of homocysteine are associated with increased risk of stroke, cognitive impairment and Alzheimer’s.

6. **Blackcurrant boost** - Vitamin C has long been thought to have the power to increase mental agility. One of the best sources of this vital vitamin is blackcurrants.

7. **Pick up pumpkin seeds** - Just a handful of pumpkin seeds a day is all you need to get your recommended daily amount of zinc, vital for enhancing memory and thinking skills.

8. **Broccoli** - A great source of vitamin K, which is known to enhance cognitive function and improve brainpower.
9. **Go nuts** - Studies suggest a good intake of vitamin E might help to prevent cognitive decline in later life. Nuts are a great source of Vitamin E along with leafy green vegetables, asparagus, olives, seeds, eggs, brown rice and vegetables.

10. **Cut out sugar** - eat fewer high sugar foods which are loaded with calories but have little nutritional value. Sugary foods are absorbed quickly into the bloodstream. This may cause an initial high or surge of energy that soon wears off, leaving you feeling low and tired.

11. **Add protein** - Include protein at every meal i.e. meat, fish, eggs, milk, cheese, nuts, beans or lentils; to ensure a continuous supply of the amino acid tryptophan to the brain.

12. **Cut out saturated fats** - Research shows that diets high in saturated fats increase your risk of dementia and impair concentration and memory. Choose a monounsaturated margarine or butter for spreading and avoid margarines or low fat spreads containing omega 6 polyunsaturated or hydrogenated trans fast which are damaging to your brain and arteries.

13. **Keep drinking** - Not drinking enough fluids has significant implications for mental health. The early effects of even mild dehydration can cause irritability, loss of concentration and reduced mental functioning.

14. **Go green** - Green tea contains polyphenosis, powerful antioxidants that protect against free radicals that can damage brain cells. Among many other benefits, regular consumption of green tea may enhance memory and mental alertness and slow brain ageing.

15. **Drink wine (or grape juice) in moderation** – keeping your alcohol consumption in check is key since alcohol kills brain cells. But in moderation (around one glass a day for women and two for men), alcohol may actually improve memory and cognition. Red wine appears to be the best option as it is rich in resveratrol, a flavonoid that boosts blood flow in the brain and reduces the risk of Alzheimer's. Other resveratrol-packed options include grape juice, cranberry juice, fresh grapes and berries, and peanuts.
Conclusion

Staying healthy and feeling your best is important at any age and that doesn’t change just because you have a few more grey hairs. For many, retirement is not a time to slow down but a time to explore new adventures and hobbies. These tips can help you maintain your physical, emotional and mental health and guide you on the best approach to take to enjoy your later life to the full.

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http://www.helpguide.org/life/healthy_aging_seniors_aging_well.htm
http://www.helpguide.org/life/prevent_memory_loss.htm

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Jo Lewin - Nutritional therapist