

Healthy ageing - stay mentally active

Growing older does not mean that your mental abilities will necessarily be reduced. There's a lot you can do to keep your mind sharp and alert. Researchers believe that many of the supposed age-related changes that affect the mind, such as memory loss, are actually lifestyle related. Just as muscles get flabby from sitting around and doing nothing, so does the brain.

A marked decline in mental abilities may be due to factors like prescription medications or disease. Older people are more likely to take a range of medications for chronic conditions than younger people. In some cases, a drug (or a combination of drugs) can affect mental abilities.

Certain diseases that are more common to old age, such as Alzheimer's disease, can also be the underlying cause of declining mental abilities. It is worth checking with your doctor to make sure any cognitive changes, such as memory loss, aren't associated with drugs or illness.

Age-related changes to the brain

Some of the normal age-related changes to the brain include:

- Fat and other deposits accumulate within brain cells (neurones), which hinders their functioning.
- Neurones that die from 'old age' are not replaced.
- Loss of neurones means the brain gets smaller with age.
- Messages between neurones are sent at a slower speed.

The brain can adapt

A brain that gets smaller and lighter with age can still function as effectively as a younger brain. For example, an older brain can create new connections between neurones if given the opportunity. There is evidence to suggest that mental abilities are 'shared' by various parts of the brain so, as some neurones die, their roles are taken up by others.

Physical fitness is important

Some conditions that can affect the brain's ability to function, such as stroke, are associated with diet, obesity and sedentary lifestyle choices. Keeping an active body is crucial if you want an active mind. Suggestions include:

- At least 30 minutes of moderate exercise every day delivers an oxygen boost to the brain.
- Exercising in three 10-minute blocks is enough to deliver significant health benefits.
- Regular exercise can improve your brain's memory, reasoning abilities and reaction times.
- Avoid the complications of obesity (such as diabetes and heart disease) by maintaining a healthy weight for your height.
- Avoid smoking and drinking to excess.

Eat a healthy diet

Good nutrition helps to keep your brain in optimum condition. Suggestions include:

- Make sure your diet contains sufficient B group vitamins.
- Glucose is the brain's sole energy source, so eat a balanced diet and avoid extreme low carbohydrate diets.

- Narrowed arteries (atherosclerosis) can reduce blood flow to the brain, so make sure you eat a low fat, low cholesterol diet.

Improve your mental fitness

Researchers at Stanford University (USA) found that memory loss can be improved by 30 to 50 per cent simply by doing mental exercises. The brain is like a muscle - if you don't give it regular workouts, its functions will decline. Suggestions include:

- Keep up your social life and engage in plenty of stimulating conversations.
- Read newspapers, magazines and books.
- Play 'thinking' games like Scrabble, cards and Trivial Pursuit.
- Take a course on a subject that interests you.
- Cultivate a new hobby.
- Learn a language.
- Do crossword puzzles and word games.
- Play games that challenge the intellect and memory, such as chess.
- Watch 'question and answer' game shows on television, and play along with the contestants.
- Hobbies such as woodwork can improve the brain's spatial awareness.
- Keep stress under control with meditation and regular relaxation, since an excess of stress hormones like cortisol can be harmful to neurones.

Boost your memory

Good recall is a learned skill. There are ways to improve a failing memory no matter what your age. Suggestions include:

- Make sure you're paying attention to whatever it is you want to remember. For example, if you're busy thinking about something else, you mightn't notice where you're putting the house keys.
- Use memory triggers, like association or visualisation techniques. For example, link a name you want to remember with a mental picture.
- Practice using your memory. For example, try to remember short lists, such as a grocery list. Use memory triggers to help you 'jump' from one item to the next. One type of memory trigger is a walking route that you know well. Mentally attach each item on your list to a landmark along the route. For example, imagine putting the bread at the letterbox, the apples at the next-door neighbour's house and the meat at the bus stop. To remember the list, you just have to 'walk' the route in your mind.

Conditions and events that can impair brain function

Getting older doesn't necessarily mean that the mind stops working as well as it once did. However, some of the conditions and events more common to older age that affect brain function include:

- Atherosclerosis
- Dehydration
- Dementia, such as Alzheimer's disease
- Depression
- Diabetes mellitus
- Heart disease
- Medications - prescribed medicines should be regularly reviewed so that unwanted side effects are avoided, and drugs should be discontinued if they are no longer required
- Poor nutrition, vitamin deficiency
- Parkinson's disease
- Stroke.

Many conditions can be managed

Many of the conditions that may affect brain function can be managed effectively. The following factors have all proved to be important:

- Lifestyle and diet changes
- Monitoring tests for hypertension, cholesterol and diabetes
- Medications.

Where to get help

- Your doctor
- Gerontologist
- Neurologist

Things to remember

- Researchers believe that many of the supposed age-related changes which affect the mind, such as memory loss, are actually lifestyle related.
- Keeping an active body is crucial if you want an active mind.
- Some of the conditions and events more common to old age that may hinder brain function include dementia, Parkinson's disease and atherosclerosis.

This page has been produced in consultation with, and approved by:

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