

Use your brain or lose it to Alzheimer's

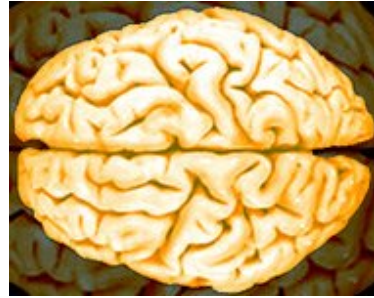
Aljazeera News

Exercise your brain. Nourish it well. And the earlier you start, the better. That's the best advice doctors can yet offer to ward off Alzheimer's disease.

There's no guarantee. But more and more research shows that some fairly simple steps can truly lower your risk of the deadly dementia.

Also, if Alzheimer's strikes anyway, people who have followed this advice tend to do better - their brains withstand the attack longer before symptoms become obvious.

The goal: Build up what's called a "cognitive reserve".



Some simple steps can lower the risk of Alzheimer's disease

"Cognitive reserve is not something you're born with," Dr Yaakov Stern of Columbia University told a meeting of Alzheimer's researchers on Monday. "It's something that changes, and can be modified over time."

In fact, there's now enough research backing this theory that the Alzheimer's Association is offering free classes around the country to teach people - of any age, but especially baby boomers - just how to do it. They call it "maintain your brain".

Keeping your mind

"There is tremendous interest in making sure that by the time you're 80, your brain is there with you," explains California psychologist Elizabeth Edgerly, who leads the programme.

A healthy brain weighs about 900g the size of a cauliflower. Networks of blood vessels keep oxygen flowing to 100 billion brain cells.

Branch-like tentacles extend from the ends of those cells, the brain's own specialised wiring to communicate.

Under a microscope, they look like bushy hairs. A healthy brain can continue to grow new neurons and rewire and adapt itself throughout old age - and you want your brain to be as bushy as possible.

That growth starts in childhood, when parents read to tots, and depends heavily on getting lots of education.

The less educated have double the risk of getting Alzheimer's decades later than people with a college education.



A healthy brain can grow new neurons throughout life



Likewise, people who are less educated and have a not-so-challenging job have three to four times the risk of getting Alzheimer's, Stern says.

If you're already 40, don't despair.

Use it or lose it

What's the advice? Your brain is like a muscle - use it or lose it. Brain scans show that when people use their brains in unusual ways, more blood flows into different neural regions and new connections form.

Do a new type of puzzle, learn to play chess, take a foreign language class or solve a vexing problem at work. Try to challenge your brain daily, Edgerly advises.

A healthy brain is not just an intellectual one. Social stimulation is crucial, too. Do not sit in front of the television. People who are part of a group, whether it's a religious group or a book club, age healthier.

"There is tremendous interest in making sure that by the time you're 80, your brain is there with you"

Declining social interaction predicts declining cognitive function, new government research shows.

Elizabeth Edgerly,
California psychologist

So do stress and anxiety. People who have what is called chronic distress - extreme worriers - are twice as likely to develop some form of dementia, reports Dr Robert Wilson of Rush University Medical Centre.

Why? Autopsies show these people actually had fewer bush-like tentacles, or dendrites, linking their brain cells, meaning their brains were more vulnerable when disease struck.

It is not clear if someone can reverse a lifetime of worry and anxiety, but animal studies suggest exercise eases the effects of this kind of stress.

Clogged arteries

Getting physical is also crucial. Bad memory is linked to heart disease and diabetes, because clogged arteries slow blood flow in the brain.

Elderly people who were less mentally and physically active in middle age are about three times as likely to get Alzheimer's as they grey.

A study from Sweden found the obese are twice as likely to get Alzheimer's.

Go for the triple-whammy of something mentally, physically and socially stimulating all at once: Coach your child's ball team. Take a dance class. Strategise a round of golf.



And do not forget diet. The same foods that are heart-

The mentally and physically active are less likely to get Alzheimer's



healthy are brain-healthy, so avoid artery-clogging saturated fat and try for omega-3 fatty acids, found in fish and nuts.

Eat dark-skinned fruits and vegetables, which are particularly high in brain-healthy vitamins E and C.

Harvard researchers found eating dark green leafy vegetables such as spinach improves cognitive function.

Also, B vitamins and folic acid, found in cereals, breads and fruits such as strawberries, are important for brain health.

