

CHALLENGE THE BRAIN AND BE A SUPER AGER

by Dr Vinod Kumar

Today, I called a premedical friend after 66 years to wish him on his birthday and was delighted with his zestful greetings even as he failed to place me or even recollect my face. Nevertheless, he was overjoyed and soon started reminiscing and recollecting with me about so many friends and nostalgic events of the yester years during the ensuing conversation that lasted for over 15 minutes. In the last 18 months of covid time, while senior citizens are holed up in their homes, it was my time to search out old friends and batchmates and I soon found myself with a bagful of mixed responses. Some had an active attitude of my premedical friend but some had varying degree of mental slowness, difficulty in recalling the past, shaken confidence or even depression as per account of their spouses. Not having interacted with them for decades, I had no clue as to what went wrong with those who became cognitively weak.

But I went about looking into the concept of cognitively active super agers who are defined in the literature as people in their 70s, 80s and beyond whose ability-whether it be their memory, way of thinking or even aerobic fitness-is of the standard of someone "at least 20 years younger". Dr. Bradford Dickerson, a neurologist at Harvard-affiliated Massachusetts General Hospital and his colleagues have been studying super agers for several years. Their results suggest that embracing new mental challenges may be the key to preserving both brain tissue and brain function.

On average, middle-aged individuals lose approximately 2.24 percent of brain volume every year. In contrast, super agers lose around 1.06 percent annually, making them less prone to developing memory disorder like dementia. Researchers also found that some areas of the brain appeared thinner on functional magnetic resonance imaging — an indication of cell loss — in the older people who had word memorization problem, but not in those who had word retention power as well as younger participants. The thicker these regions of brain are, the better a person's performance on tests of memory and attention.

There are umpteen number of brain challenging tasks that may preserve the



memory and other cognitive functions and thereby provide a good quality of life in old age. Following table is a collation of some of these tasks.

COGNITIVE ENHANCING ACTIVITIES FOR THE AGED TO PROMOTE BRAIN HEALTH

Accomplish new tasks: Like new reading, preparing and listening to lectures, learning new musical instruments, unpacking and assembling newly bought gadgets etc.

Befriend grandchildren: To play puzzles & other mental games, engage with them in story-telling, playing riddles, antakshrees etc.

Chess playing & other games with friends and family: Other indoor games are like video games, carom and cards.

Dominant and non-dominant hand use: This is useful to stimulate both sides of the brain. Knitting is an example especially for women.

Explore the internet: Learning and using a computer is like treading in uncharted waters and is mentally stimulating. Therefore do online shopping, pay utility bills, submit income and property tax returns and driving license renewal

others even at the cost of temporary disappointment and frustration.

Fun with puzzles for self: Crossword puzzles for old timers but many recent puzzles and brain games of various kinds are available.

Gardening: Not simply a hobby but planning a garden too since arranging the plants and flower pots is also stimulatory.

Healthy humor: These can evoke a mental reaction for exchanging jokes. Laughter is the best medicine too.

Imbibe a new language and skill: It is a good new task for brain health in old age. Figuring how to tweet or skype is also useful.

Apart from enhancing immunity, listening to music also helps intelligence, memory and cognition and is supposed to stimulate both sides of the brain.

Finally, it is important to remember that as healthy brain begets a healthy body, healthy body also begets a healthy brain. Hence if we care for our body by eating right, exercising well, sleeping full and avoiding smoking, we are nurturing for a healthy brain too.