

Aging is Inevitable; Losing Your Mind Isn't

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Your brain doesn't know how old you are – and doesn't care.

Of all of the uncontrollable factors in our life, the process of aging may be the most daunting. Synonymous with aging is the concept that cognitive decline is universally unavoidable. What may be encouraging is that while some memory loss may be a natural part of aging, researchers are discovering that older people can maintain more of their cognitive function well into later years. Neurobiologists Dr. Elizabeth Gould and Dr. Charles Gross at Princeton University have validated that thousands of freshly born neurons arrive each day in the cerebral cortex, the outer rind of the brain where higher intellectual functions are centered.

The process of neurogenesis, the growth of new brain cells, is controlled by our DNA. Fortunately, many of the factors that influence our DNA are under our direct control. A variety of factors including physical exercise, critical thinking, social interaction, caloric restriction, curcumin and the omega-3 fat DHA have demonstrated to profoundly inhibit the process of brain deterioration.

This is a powerful message and these factors are all within our grasp.

Physical Exercise

In a report featured in the *Journal of the American Medical Association (JAMA)*, titled "Effect of Physical Activity in Cognitive Function in Older Adults at Risk for Alzheimer's Disease," researchers found that elderly individuals engaged in regular physical exercise for a 24-week period had an improvement of an astounding 1,800 percent on measures of memory, language ability, attention and other important cognitive functions compared to an age-matched group not involved in the exercise program. Merely by engaging in regular physical exercise, the door is open to the possibility of actively taking control of your mental destiny.

Caloric Restriction

In January, 2009, a study published in the *Proceedings of the National Academy of Science* reported that those elderly individuals who reduced their caloric consumption by 30 percent profoundly increased memory function, while those of similar age group were instructed to eat whatever they wanted experienced a small, but clearly defined decline in memory function. The authors concluded, "The present findings may help to develop new prevention and treatment strategies for maintaining cognitive health into old age." What a concept -- preventive medicine for the brain.

Curcumin

Curcumin, the main active ingredient in the spice turmeric, has attracted the interest of neuroscientists around the world. Interestingly, in evaluating villages in India where turmeric is used in abundance in curried recipes, epidemiological studies have found that Alzheimer's disease is only about 25 percent as common as in the U.S. As curcumin is a proven anti-oxidant and anti-inflammatory agent, there is little doubt of its positive effects on enhanced production of brain neurons, which is why it is theorized that those consuming curcumin are so resistant to this brain disorder.

DHA

Like curcumin, DHA enhances gene expression for the production of new neurons. In a trial involving 485 healthy older individuals with mild memory problems, those given a supplement containing DHA for six months had almost double the reduction in errors on a test that measures learning and memory performance versus those who took a placebo. The benefit is roughly equivalent to having the learning and memory skills of someone three years younger.

Don't Quit Your Day Job

An analysis of 400 British men suggest that those working in occupations requiring critical thinking and social interaction later in life have shown the ability to ward off cognitive decline.

Harnessing the expression of our DNA is empowering, and the tools to better brain health are available to us all -- right now!

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