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Essay IV

How can we keep our mind young?

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If I tell you that there is a way that could magically keep your mind keen and sharp as it is now—or even Improve it to a better state—what would you say? To be honest, I probably can guess if you are a youngster, what is your answer. Usually young people don’t care about what they have, like me when I was a youngster. But after 40, especially when you immigrate to a new country wanting to start over, learn a new language, find a new career, and—unlike an old dog—want to learn new tricks, you want to use your maximum mind power to grow. This is the reason I ask myself, can we keep our mind young?

1. **What is the Brain?**

It is actually obvious when we talk about the brain, we mean that—about 3pounds—physical part of the body, covered with skull and consists of white matter, covered with gray matter, and has about hundreds of billion neurons. Till now it is—more or less—common sense. But when we start talking about mind, you would see different answers.

1. **What is the Mind?**

In the article by the name, “What Is the Mind?”, according to Gregg Henriques Ph.D., the writer of the book “[Theory of Knowledge](https://www.psychologytoday.com/blog/theory-knowledge)” and [professor of psychology at James Madison University](https://www.psychologytoday.com/experts/gregg-henriques-phd), usually people use mind as “the seat of human consciousness, the thinking-feeling 'I' that seems to be an agentic causal force that is somehow related, but is also seemingly separable from the body.” It is happened that these two words are used interchangeably, but when we talk about physical aspect, we refer it to “Brain”, and when we talk about the outcome of using our brain, we refer to the “Mind”. [Tania Lombrozo](https://www.edge.org/memberbio/tania_lombrozo), Associate Professor of Psychology, UC Berkeley, in “The Mind Is Just The Brain”, explains this dualism that Descartes posited these two kinds of conditions, “non-physical mind” and physical body. Then she quotes from Marvin Minsky, “the mind is what the brain does."

1. **Definition of the mind aging**
2. **What happens to your brain when you age?**

On “Ageing and the brain” published in the [US National Library of Medicine](http://www.nlm.nih.gov/)   
[National Institutes of Health](http://www.nih.gov/) website, Rauth [Peters](http://www.ncbi.nlm.nih.gov/pubmed/?term=Peters%20R%5Bauth%5D), the writer of the article, reveals that brain “shrinks” and changes in all aspects; from “molecules to morphology.” Peters claims, “Incidence of stroke, white matter lesions, and dementia also rise with age, as does level of memory impairment and there are changes in levels of neurotransmitters and hormones.” Peters explains that after 40, the brain’s volume and weight decline by 5% each decade. This number would increase after age 70.

As a matter of fact, it is obvious that like all other parts of the body, our brain will age through time. According to Harvard Health Publications, along with changes in brain because of age, “mental function” will decline which assumed as the source of the most feared side effects of aging. But it doesn’t mean that you would have those mental illnesses for sure because of aging and there are ways to reduce the risk.

1. **Solution to mind age**
2. **Cognitive Reserve**

William J. Tippett, an assistant professor at the University of Northern British Columbia, in his book “Building an Ageless Mind” talks about cognitive reserve, which refers to a person’s “general ability to create a strong, healthy brain that can handle adverse events” (59). He claims cognitive reserve often seen in people who have a high IQ, what they do is challenging, or they have higher education. He believes more people use their brain efficiently, they will build up more brain’s capacity, which leads to better “neural processing” (59). He concludes that due to “cognitive reserve hypothesis”, if you have a higher cognitive reserve, it leads you to a “more “flexible” or “malleable” brain that can handle changes related to neuropathology (biological diseases such as AD) or vascular damage (change in brain structure and blood vessel structure), which often delays many individuals from displaying, noticing, and reporting any significant cognitive impairment.” (60)

1. **Mental Stimulation**

On Harvard Health Publications website, there are 12 ways to reduce the chance of dementia—which is a kind of memory loss—when you get older. The first activity they recommend is to “get mental stimulation” which is the result of a research on humans and mice. The article claims, “doctors suspect that brainy activities stimulate new connections between nerve cells and may even help the brain generate new cells, developing neurological "plasticity" and building up a functional reserve that provides a hedge against future cell loss.”

Other researches, more or less, talk about these concepts and advising to do the same thing. The difference is in detail—which could be more effective and important. For example, Greg. Miller in an article "Computer game sharpens aging minds”, published in Opposing Viewpoints in Context, represents a game that’s designed for elders to “strengthen the neural circuits” and improve their memory. HiFi—name of this game—designed to affect specific part of the brain through visual scene and sounds during the game.

1. **Having healthy diet & controlling your critical numbers**

It should be important for everybody to know their critical numbers. These critical numbers are: blood sugar (The amount of sugar—glucose—in the blood), blood pressure (The force of blood against the arteries when the heart beats and rests), and cholesterol level (A waxy substance produced by the liver), especially their getting over 40.

According to Alzheimer’s Association, quoted from American Diabetes Association, from people over 64 in U.S., 27% have diabetes and about half of them have prediabetes. It claims that there are numbers of studies show people with diabetes problem “have a lower level of cognitive function and are at higher risk for dementia than individual without diabetes. Another research from this publisher in 2013 shows a “strong correlation “between diabetes and Alzheimer’s disease”.

“Your Brain Matters” is the name of a—governmental funding—website focusing on Alzheimer’s in Australia. They illustrate a high level of cholesterol—when it is untreated—causes “atherosclerosis (thickening of artery walls) and affect the blood supply to the brain.” It is also produced plaques in the brain “that are thought to cause Alzheimer’s disease.” They also acknowledge that high level of cholesterol could be reduced by exercise, medication, and healthy diet.

According to Harvard Health Publications, blood pressure is the “vital force that propels oxygen-rich blood to all parts of your body.” There are numbers of factors that affect blood pressure; “genetic, hormonal, metabolic, neurological, psychological, and lifestyle factors”, and these factors vary from minute to minute, so your blood pressure changes too. This website analyzes, “Since hypertension damages blood vessels, it's easy to see how it contributes to vascular dementia.” It also reveals that controlling blood pressure can reduce the “cognitive dysfunction” risk. These ways to control blood pressure are fairly same as the other two—Diabetes and Cholesterol—like, exercise, diet, weight control, moderate alcohol use, and stress control.

1. **Exercising**

An article published on Harvard health publications website by title “Moderate and intense exercise may slow brain aging by 10 years”, claims—during observational study about 876 people with an average age of 71 years included of two groups: first they didn’t do any exercise or did a light one, second, 10% of those people, did a serious exercise like running and aerobic—people with low level of activity have “a greater mental decline over the five years compared with those with high activity levels. The difference was equal to 10 years of brain aging, according to the researchers.”

1. **Conclusion**

If you are looking for a pill or mojo to keep your brain young, it is not coming yet. I take two precious lessons of life: first, there are few things which are not achievable, others are. Second one, to achieve your goals mostly there is no short cut. If you want to gain something, you should pay something for it—could be your time, your money, your time and energy, or your effort.

At the end, I should add there are other ways that help reduce mind aging risk. Harvard health publications claim that these activities may help: using low-dose aspirin, avoid tobacco, using alcohol responsively, be aware of your emotions, protecting your head, and developing a social network.

1. **Works Cited**

“12 ways to keep your brain young.” Harvard Health Publications: Harvard Medical

School. Jun.2006. Web. 11 Aug. 2016.

“Blood pressure and your brain,” Harvard Health Publications: Harvard Medical

School. Oct.2009. Web. 11 Aug. 2016.

“Diabetes and Cognitive Decline.” Alzheimer’s Association.

Oct. 2015. Web. 11 Aug. 2016.

Drew, Linda., et al. “Learning New Skills Keeps an Aging Mind Sharp.” Association for

Psychological Science. Oct. 2013. Web. 11 Aug. 2016.

[Henriques, Gregg.](https://www.psychologytoday.com/experts/gregg-henriques-phd) “What Is the Mind?” Psychology Today. 22 Dec. 2011.

Web. 11 Aug. 2016.

[Lombrozo](https://www.edge.org/memberbio/tania_lombrozo), Tania. “The Mind Is Just the Brain.” Edge. Edge Foundation,

Web. 11 Aug. 2016.

Miller, Greg. "Computer game sharpens aging minds." Science 310.5752 (2005):

1261.Opposing Viewpoints in Context. Web. 11 Aug. 2016.

Peters, R. “Ageing and the Brain.” Postgraduate Medical Journal 82.964 (2006): 84–

88. PMC. Web. 11 Aug. 2016.

Sanders, Laura. "The Mature Mind." Science News 190.2 (2016): 22-25. Academic

Search Premier. Web. 11 Aug. 2016.

Tippett, Willim J. Building an Ageless Mind: Preventing and Fighting Brain Aging and

Disease. Maryland: Rowman & Littlefield Publisher, Inc., 2013. Print.

“Your Brain Matters: The Power of Prevention.” Alzheimer's Australia.

2014. Web. 12 Aug. 2016.