

Dementia and Alzheimer Disease Can Be Cured Naturally!

Sara Thyr, ND

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Have you or a loved one been affected by Alzheimer Disease or dementia? Most people have someone in their lives who has been touched by it. The statistics are staggering. Many of my patients are working harder than ever to protect their brains as they age. Especially in light of the fact that most people, when given this diagnosis, are not given much hope for a long and happy life enjoying their golden years, enjoying travel and watching their grandkids grow. They're likely to not even recognize those people who love them so within a few years. 1 in 3 people over the age of 80 years will experience dementia. In the United States, 5.2 million people over age 65 have Alzheimer Disease. That number is expected to top 6.7 million by 2025. (The s was dropped from Alzheimer's disease a couple of years ago by the powers that be - in case the way that sounds is unfamiliar to you.)

The causes are multi-factorial. Therefore so are the treatments. From nutrient deficiencies, food allergies, and heavy metals to inflammation and stress - handling this condition requires looking at all of the myriad possible contributors. Recent evidence also shows the blood sugar dysregulation, including diabetes and pre-diabetes, contribute, with some calling Alzheimer Disease Type 3 Diabetes. In my practice, I have seen cutting out sugar (and foods that turn to sugar like bread and pasta) make a significant difference in memory and cognitive function. Other hormones, such as thyroid, estrogen, progesterone, testosterone, and adrenal hormones, must be functioning optimally.

Along with cutting sugar, people interested in brain health will want to cut out medications that are linked to dementia and brain health decline, such as statins, diphenhydramine, and possibly zolpidem. There are excellent natural alternatives to all of these that often work just as well, if not better.

Along with finding and eliminating the cause, which is really critical, I focus on natural therapies that have been scientifically studied and proven to be effective. Here are just a few of the things that can help dementia, Alzheimer Disease and Mild Cognitive Decline.

Exercise

Exercise is critical as we age for so many reasons. But in brain health it is essential. There are few things that can increase brain derived neurotrophic factor, but exercise is one of them. This substance, BDNF, helps to get rid of the plaques that form and cause memory issues and cognitive loss. It also helps protect neurons from damage. Exercise also increases insulin

sensitivity and blood sugar control. It also increases cerebral perfusion of blood, which has been shown to improve memory and dementia.¹

It may be more difficult as we age to find exercises that don't cause pain or falls or expense. But finding them is worthwhile. This knowledge makes staying fit and moving for your whole life even more important. It is much more difficult to begin a fitness routine at age 75. Research has shown a 45% reduction in Alzheimer Disease in those who are physically active.

Cardiovascular exercise is the most important. This is getting your heart rate up for a given amount of time. One should never begin a new program to exercise without a doctor's review and consent. But once that is received there are lots of great exercises that increase heart rate without much risk. Swimming is excellent, as are rowing machines and walking on a treadmill. To increase heart rate you can simply increase the incline on the treadmill. There are also excellent videos on YouTube that are designed with seniors in mind, for those who may not have access to a gym. I also really love the Nordic Walking sticks, which have been shown to increase both cardiovascular health as well as lean muscle mass. What is most important is finding something that you enjoy, ideally that can be done with a friend or a partner. Research shows that social interaction helps keep people committed to exercising. We all know it is more fun with a friend!

Meditation

Meditation has been shown to have profound effect on mental balance and cognitive function. It can increase neuroplasticity, which is like helping your brain's neurons to remain flexible as you age, rather than become brittle and fall apart.

Meditation improves memory in studies of people with subjective cognitive decline, mild cognitive impairment, and highly stressed caregivers, all of whom are at increased risk for subsequent development of AD. It also improves sleep, decreases depression, reduces anxiety, down regulates inflammatory genes, upregulates immune system genes, improves insulin and glucose regulatory genes, and increases telomerase by 43%; the largest ever recorded² (telomerase is what keeps your DNA strong and dividing properly).

Findings from the studies reviewed support the clinical efficacy of mind-body practices in improving behavioral and psychological symptoms exhibited by individuals with dementia.³

Part of my research led me to a meta-analysis - one research article that is reviewing many research studies on the same subject, to see if they come to any similar conclusions. Thirteen studies were considered eligible for review and involved a wide variety of meditation techniques and included participants with and without cognitive impairment. All studies reported significant

¹ [Gregory J. Christie](#),^{1,2,*} [Tara Hamilton](#),¹ [Bradley D. Manor](#),³ [Norman A. S. Farb](#),⁴ [Faranak Farzan](#),^{1,5} [Andrew Sixsmith](#),^{1,2,6} [Jean-Jacques Temprado](#),⁷ and [Sylvain Moreno](#)^{1,2,8,*} Do Lifestyle Activities Protect Against Cognitive Decline in Aging? A Review. [Front Aging Neurosci](#). 2017; 9: 381. Published online 2017 Nov 20. doi: [10.3389/fnagi.2017.00381](#)

² [Khalsa DS](#)^{1,2}. Stress, Meditation, and Alzheimer's Disease Prevention: Where The Evidence Stands. [J Alzheimers Dis](#). 2015;48(1):1-12. doi: [10.3233/JAD-142766](#).

³ [Anderson JG](#), [Rogers CE](#), [Bossen A](#), [Testad I](#), [Rose KM](#). Mind-Body Therapies in Individuals With Dementia: An Integrative Review. [Res Gerontol Nurs](#). 2017 Nov 1;10(6):288-296. doi: [10.3928/19404921-20170928-01](#). Epub 2017 Oct 6.

increases in grey matter volume in the meditators/intervention group, albeit in assorted regions of the brain. Limited research exists on the mechanisms through which meditation affects disease-related neurodegeneration, but preliminary evidence suggests that it may offset grey matter atrophy.⁴

The following are the results of one study that shows benefits in meditation, as well as other therapies. There were 127 participants, with an average age of 70.69. Each patient received weekly personalized cognitive stimulation, neurofeedback training, and brain coaching/counseling for eating a Mediterranean diet, taking omega-3 supplements, increasing fitness, and practicing mindfulness meditation. The post-program testing showed 84% of the patients experienced statistically significant improvements in their cognitive function ($p < 0.05$). Among the random sample of 17 patients who had a post-program quantitative MRI, 12 patients had either no atrophy or an actual growth above the baseline volume of their hippocampus.⁵

DHA

DHA is one of the components of fish oil, docosahexaenoic acid. People with a certain genetic snp, called ApoE4, are much more likely to have an essential fatty acid deficiency.⁶ They have less uptake of DHA and therefore less DHA in the brain and other tissues. Behavioral and cognitive deficiencies have been seen in animals with low DHA levels. Research has shown that supplementing people with the E4 allele can help prevent Alzheimer Disease in this population. Taking DHA orally can stop the neurodegeneration and reverse the neurological damages that a deficiency of this important nutrient can cause.⁷ My favorite is the Select DHA product by OrthoMolecular labs because it is 580mg of DHA per capsule. So most people will only need to take 1-2 of them/day.

⁴ [Last N, Tufts E, Auger LE](#). The Effects of Meditation on Grey Matter Atrophy and Neurodegeneration: A Systematic Review. [J Alzheimers Dis](#). 2017;56(1):275-286. doi: 10.3233/JAD-160899.

⁵ [Fotuhi M1, Lubinski B, Trullinger M, Hausterman N, Riloff T, Hadadi M, Raji CA](#). A Personalized 12-week "Brain Fitness Program" for Improving Cognitive Function and Increasing the Volume of Hippocampus in Elderly with Mild Cognitive Impairment. [J Prev Alzheimers Dis](#). 2016;3(3):133-137. doi: 10.14283/jpad.2016.92.

⁶ Knock, TG, [Chouinard-Watkins R1, Plourde M2](#). Carriers of an apolipoprotein E epsilon 4 allele are more vulnerable to a dietary deficiency in omega-3 fatty acids and cognitive decline. [Biochim Biophys Acta](#). 2017 Oct;1862(10 Pt A):1068-1078. doi: 10.1016/j.bbali.2017.07.004. Epub 2017 Jul 18.

⁷ Knock, TG, [Chouinard-Watkins R1, Plourde M2](#). Carriers of an apolipoprotein E epsilon 4 allele are more vulnerable to a dietary deficiency in omega-3 fatty acids and cognitive decline. [Biochim Biophys Acta](#). 2017 Oct;1862(10 Pt A):1068-1078. doi: 10.1016/j.bbali.2017.07.004. Epub 2017 Jul 18.



CBD Oil/Cannabis products

In humans there is an enzyme called Acetylcholinesterase (AChE) which contributes to the formation of the beta amyloid (A β) plaques that cause Alzheimer Disease. Drugs for this are called AChE Inhibitors. Interestingly, THC (tetrahydrocannabinol) has been shown to be a potent inhibitor of A β aggregation⁸ And research has demonstrated that stimulating the brain's marijuana receptors may offer protection by reducing brain inflammation and restoring neurogenesis⁹ (which means the growth of good, healthy neurons in the brain). Cannabinoids succeed in preventing the neurodegenerative process occurring in dementia and Alzheimer Disease¹⁰. CBD and cannabinoids offer a multi-faceted concept for the treatment of Alzheimer Disease by both providing protection for the neurons, as well as reducing the inflammation that can contribute to the disease. AT the same time it supports the mechanisms intrinsic to the brain to repair itself - augmenting neurotrophin (a protein that protects brain cells) production and enhancing the growth of new brain cells.¹¹

Researchers have found that CBD and cannabis promotes growth of neurons in the hippocampus, an area of the brain important for learning and memory. Research shows that “cannabinoids are the only illicit drug that can promote adult hippocampal neurogenesis

⁸ Eubanks, Lisa M., et al. “A Molecular Link Between the Active Component of Marijuana and Alzheimer's Disease Pathology.” *Molecular Pharmacy* 3:6 (2006): 773-777

⁹ Wenk, Gary, Ph.D. “Maintaining Memories with Marijuana,” *Psychology Today*, (July 14, 2010) www.psychologytoday.com/blog/your-brain-food/201007/maintaining-memories-marijuana

¹⁰ Ramirez, Belen G., et al., “Prevention of Alzheimer's Disease Pathology by Cannabinoids: Neuroprotection Mediated by blockade of Microglial Activation.” *Neurobiology of Disease* 25 (February 23, 2005):1904-1913.

¹¹ Campbel, V.A., Gowran, A., “Alzheimer's disease: taking the edge off with cannabinoids?? *British Journal of Pharmacology* 152, (November, 2007): 655-662.

following chronic administration.”¹²

Cannabinoids also promote antioxidant status, which is extremely important to protect the brain from degenerative processes. Investigators reported that the “antioxidant properties of cannabinoids suggest a therapeutic use as neuroprotective agents,” and that the non-psychoactive cannabinoid “cannabidiol protected neurons to a greater degree than either the dietary antioxidants tocopherol (vitamin E) or ascorbate (vitamin C).”¹³

I became certified this past year to administer the MoCA test (Montreal Cognitive Assessment). This is a very good test to determine a person’s level of cognitive decline - from mild to moderate to full blown dementia. It is important to have this test done early as possible, since cognitive decline is much easier to treat than full blown Alzheimer Disease. Having the MoCA test done is also a nice baseline to have to see improvement as treatment progress, or lack thereof - showing us if there is a need to change the treatment plan.

I urge anyone who has mild cognitive impairment to connect with a naturopathic doctor as soon as possible. The only things that have been proven to extend brain health and cognitive decline are natural substances, as well as diet and lifestyle changes. Naturopathic doctors are experts in these fields. There are many other lab tests, rule outs, nutritional recommendations, and supplements that I use in my practice. As this is an area of great interest to me, I will be writing about it more and delving deeper into these areas in future posts.

¹² Jiang, W., et al., “Cannabinoids promote embryonic and adult hippocampus neurogenesis and produce anxiolytic- and antidepressant-like effects,” *Journal of Clinical Investigation* 115 (November 2005):3104-3116.

¹³ Hampson, A.J., et al., “Cannabidiol and delta-9-THC are neuroprotective antioxidants.” *Medical Sciences* 95 (April 27, 1998): 8268-8273.