

Lifestyle Modifications That Can Affect Your Risk of Developing Dementia

The interplay of genes, environment, and lifestyle is responsible for most of our individual vulnerability and resistance to disease. As research on age-associated cognitive decline has explored the limits of the role of heredity, the role of modifiable environmental and lifestyle factors has become a source of interest and optimism. Several lifestyle and environmental factors have recently been shown to have an impact (some positive, some negative) on the likelihood of developing cognitive decline, Alzheimer's disease (AD), and other dementias.

A healthy lifestyle is associated with better cognitive functioning in older adults and, in one recent study, it was even associated with less amyloid (a marker of AD) in the brain. This is important because Alzheimer's disease, a degenerative illness in which the pathology of cognitive decline eventually results in disability and dementia, is the fifth leading cause of death among Americans who are 65 and over.

Studying the development of diseases in genetically alike twins is a traditional way to learn about the contribution of heredity. Over 25 countries keep track of all twin births as a research resource, and the Swedish Twin Registry conducted a study to explore the occurrence of AD in twin pairs. They reported in 2006 that all 11,884 twin pairs aged 65 and older in their registry were screened for cognitive dysfunction. Individuals and their twins who were suspected of having dementia then received complete clinical diagnostic evaluations for AD. There were 392 pairs in which one or both members were diagnosed with AD, and their genes were calculated to account for only 58 percent of their risk of developing AD.

Many recent large studies have confirmed that factors like diet, exercise, social participation, and some physical and behavioral conditions have an influence on the onset and progression of cognitive decline, dementia, and AD. For example, age-related hearing loss has been shown to increase an older individual's risk of cognitive decline, but correcting the loss with a hearing aid can reduce that risk.

The U.S. National Death Index (NDI) contains over 100 million accessible death records that make it possible for researchers to associate a person's cause of death **with** findings about that person from research that documented details about their environment and/or lifestyle when they were younger. Gathering information about thousands of people and then following them for many years or until their death makes it possible to generalize about the risk of developing specific diseases.

Below you will find a brief discussion of some of the conditions that have been associated with an increased or decreased risk of cognitive decline. Remember, these are not necessarily causes of decline or protections against it; they have been shown in scholarly studies of large groups of people to have a statistically significant impact on risk.

References are available on request for the research related to each of the factors listed.

Some conditions that have been linked to HIGHER dementia risk
in older adults

- Diabetes, hearing and vision loss, high blood pressure, and high or low HCL cholesterol are common in older adults and can be treated and improved in almost all cases.
- Obesity and poor bone health often result from unhealthy eating patterns. A common source is the habit of consuming too many ultra-processed, food-based products that are full of additives and stripped of nutrients, such as packaged snacks and desserts, sugary breakfast cereals, processed meats, sweetened beverages, and instant soups.
- A sedentary lifestyle and social isolation have been linked with an increased risk of developing AD. This is also true of binge drinking and excessive alcohol consumption, smoking, chronic stress, depression, and the lack of deep sleep. It is possible to lower your risk by addressing these issues and making lifestyle changes.
- Nightmares, posttraumatic stress disorder, and regular laxative use have also

been identified as risk factors that can be modified.

Some factors that have been linked to LOWER dementia risk
in older adults

- Healthy eating habits are protective, including a high fiber diet.
- It is helpful to consume leafy green vegetables and orange fruits because they contain carotenoid antioxidants, substances that provide defenses against several degenerative disorders and enhance the immune system.
- Also important are fruits (apples, berries, cherries), onions, soybeans, and teas that contain dietary flavanols, compounds that have anticancer, anti-inflammatory, and antiviral properties.
- The Mediterranean diet is recommended,
<https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/mediterranean-diet/art-20047801>, as is the MIND diet, (Mediterranean diet intervention for neurodegenerative delay),
<https://www.hsph.harvard.edu/nutritionsource/healthy-weight/diet-reviews/mind-diet/>.
- Regular exercise is crucial (see my article, “Get Moving! The value of exercise in reducing the risk of cognitive decline.” CaringKind Newsletter 3:4.
<https://www.caringkindnyc.org/2022v3-newsletter>)
- Hearing aids, cataract surgery, and other interventions that improve the ability to communicate can lower your risk of cognitive decline.
- Stimulating cognitive activities (crossword puzzles, games, reading) may build up one’s cognitive reserve and can help delay or minimize cognitive decline.
- Social activities (dancing, art classes, and other recreational and leisure activities that involve building relationships with others) are also linked with lowering the risk of developing AD.

- Also important is minimizing the consequences of physical illness with interventions like getting an annual influenza vaccination. Covid-19 and RNA vaccines have not yet been convincingly linked to lowering the risk of developing AD, but because they minimize the risk of serious illness it is reasonable to think they also may lower that risk.
- If you have type 2 diabetes, treatment with metformin shows evidence of reducing the risk of neurodegenerative diseases.
- A large study, published in February 2024, about the use of Viagra and similar erectile dysfunction (ED) drugs has produced interesting results. These drugs dilate blood vessels and have been shown to increase blood flow in the brains of animals. Men who received the most prescriptions for ED pills over the course of the study had a significantly lower risk of developing AD. Further study is necessary to understand whether the drugs can protect against AD (for women as well as for men), or whether men who are less prone to the disease are simply more likely to use the drug.

Regardless of your age or physical condition, it is vital to put in the effort to make your life as healthy and satisfying as possible. Challenge yourself to incorporate the lifestyle and environmental modifications that have been associated with reducing or delaying the development of AD.

- Eat healthily.
- Find a way to exercise regularly to whatever degree is possible for you. Even modest increases in physical activity have been shown to be beneficial.
- If you aren't working or socially active, consider volunteering or getting involved somewhere as a way to be socially and intellectually stimulated.
- Try to get the best medical care possible if something seems to be physically or psychologically wrong. Pay particular attention to treating the conditions that have been associated with an increased risk of developing dementia.

More than 6.7 million Americans aged 65 and older were said to be living with Alzheimer's in 2023, and by 2060 it is predicted that this population could increase to 13.8 million - unless there are breakthroughs to prevent and cure the disease. I am optimistic that there will continue to be lifestyle, environmental, and medical breakthroughs that will challenge this dire prediction.

Author bio: Carol A. Butler, Ph.D., LP is a leader of CaringKind support groups for people who have a parent with dementia. She is a senior psychoanalyst working with couples and individuals in her private practice in Manhattan, a clinical supervisor of psychotherapists, and a docent in the butterfly vivarium of the American Museum of Natural History.