

14 Modifiable Risk Factors That Can Help Prevent Dementia

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STORY AT-A-GLANCE

- › A study published in The Lancet identified 14 modifiable risk factors for dementia, including education, hearing loss, depression and physical inactivity. Addressing these factors could potentially prevent or delay nearly half of dementia cases
- › Strategies to reduce your dementia risk include regular exercise, protecting your senses, keeping your brain active, socializing, quitting smoking and excessive drinking, and reducing EMF exposure
- › Optimizing your mitochondrial function through diet is a crucial adjunct in preventing dementia. Start by limiting your linoleic acid intake to 5 grams (or better yet, below 2 grams), and focus on whole foods. Balance your macronutrients with an emphasis on healthy carbs your main fuel source
- › Additional prevention strategies include avoiding gluten and casein, optimizing gut flora through probiotic-rich foods and getting sensible sun exposure for vitamin D production. Maintaining low fasting insulin, and eliminating mercury and aluminum exposure may also help reduce dementia risk
- › Other strategies include avoiding anticholinergics and statin drugs, which may increase risk

According to the U.S. Centers for Disease Control and Prevention (CDC), around 5.8 million Americans currently have Alzheimer's disease, the most common type of dementia. By 2060, that number is expected to rise to 14 million, with minority populations being the most affected.¹

While it's easy to assume that dementia is just something that happens as you age, there are actually many factors that influence your risk for this neurodegenerative disease. In fact, a new study published in *The Lancet* notes that cases can be reduced by half when people make the necessary lifestyle changes.

The Goal of The Lancet's Study

The Lancet Commission, a coalition of researchers who regularly compile the latest evidence on different diseases, recently published an updated review identifying risk factors related to dementia. By updating their research at regular intervals, they hope to provide the latest practical recommendations that can help families around the world care for their loved ones affected with dementia.²

In fact, the researchers went on to say that paying attention to these risk factors may be able to prevent dementia and improve lifespan:³

"New evidence suggests that reducing the risk of dementia increases the number of healthy years of life and compresses the duration of ill health for people who develop dementia. Prevention approaches should aim to decrease risk factor levels early (i.e., the earlier, the better) and keep them low throughout life (i.e., the longer, the better)," the researchers said.

"Although addressing risk factors at an early stage of life is desirable, there is also benefit from tackling risk throughout life; it is never too early or too late to reduce dementia risk."

14 Modifiable Risk Factors of Dementia

According to the Commission's findings, there are currently 14 lifestyle-related risk factors that people can modify to reduce their risk of developing dementia, which include:⁴

- 1. Education, educational attainment and cognitive activity** – Drawing from information across different countries, The Lancet noted that "educational attainment, not years of education, appears to drive the protective effect for future cognition and dementia." In this regard, the researchers noted that having a university degree was linked to a lower risk of dementia.
- 2. Hearing loss** – The researchers noted that "as severity of hearing loss increases, dementia risk increases." While they haven't identified the exact mechanisms as to why this happens, they discovered in previous meta-analyses that there are significant associations between hearing loss and subsequent dementia.

Moreover, they theorize that hearing loss takes away another avenue of brain stimulation. Loneliness, depression, social isolation and increased cognitive power needed to hear may also contribute to dementia, the researchers say.

- 3. Depression** – The researchers noted that depression can be a sign of developing dementia. This was observed in some of the research they reviewed,^{5,6,7} and noted that "we identified an increased risk of dementia for people with depression compared with those without depression."
- 4. Traumatic brain injury (TBI)** – Car accidents, falls and being victims of violence have been identified as factors that increase the risk of dementia in the future. Certain sports, such as rugby, American football, soccer and ice hockey have also been linked to dementia. The researchers infer that direct blows to the head cause pathological changes in the brain that may eventually lead to dementia.
- 5. Smoking** – Evidence suggests that smoking cigarettes, especially during midlife, may increase dementia risk.⁸ Conversely, the researchers emphasized that people who stopped smoking (and nonsmokers in general) have a lower risk compared to smokers.^{9,10}
- 6. LDL cholesterol** – The Lancet study cited research published in the United Kingdom, noting that each 1mmol/L of increase in LDL cholesterol in adults younger than 65 years led to an 8% increase risk of all-cause dementia.¹¹ However, if you're

using statins to lower your LDL cholesterol levels, it may increase your dementia risk, too. For an in-depth look at this topic, read my article "[Statin Use Linked to Dementia](#)."

- 7. Physical inactivity, exercise and fitness** – Reduced physical activity can increase your risk of all-cause dementia and Alzheimer's disease.¹² Moreover, research states that exercise at any age is associated with better cognition compared to no physical activity at all.¹³
- 8. Diabetes** – The researchers suggest that the age when diabetes first appears influences the risk of dementia. Specifically, they noted that midlife onset diabetes, compared to a late-life appearance, had greater risk of severity.¹⁴

While it's not clear how diabetes can influence the development of dementia, it's theorized that the damage it causes to the vascular system plays a role.¹⁵ Furthermore, insulin resistance may lead to changes in the central nervous system, causing alterations in brain metabolism.¹⁶

- 9. Hypertension and its trajectory** – The researchers stressed in the previous edition of the Commission's publication that hypertension can increase the risk of all-cause dementia, Alzheimer's disease and vascular dementia.¹⁷
- 10. Obesity** – Research suggests that developing obesity during midlife can increase the risk of all-cause dementia.¹⁸ These findings were also supported in another study, adding that the risk is greater in people older than 65 years compared to other age groups.¹⁹
- 11. Excessive alcohol consumption** – Drinking alcohol with a total ethanol content higher than 168 grams per week during midlife is associated with an increased risk of dementia.²⁰ These findings were also echoed in a meta-analysis consisting of 131,415 participants throughout Europe.²¹

In another study,²² this time involving South Koreans, researchers found that heavy drinking increased the risk of dementia. Conversely, the study noted that even just

reducing consumption to a moderate amount can already lower the risk.

- 12. Social isolation** – Your psychology can also influence the risk of dementia, especially if you have infrequent social contact with others. Loneliness, for example, was associated with dementia.²³ Living alone, meeting family or friends less than once a month and having no weekly group activities have been identified as contributors.²⁴
- 13. Air pollution** – Decreasing air quality is now a topic of concern when it comes to dementia risk. Cited meta-analysis noted that air quality with high particulate matter has been associated with dementia.²⁵ Identified sources of air pollution include indoor coal and wood stoves.²⁶
- 14. Untreated vision loss** – The researchers noted that there is a correlation between vision loss and dementia. A retrospective cohort involving a total of 14 studies noted that "vision impairment is associated with an increased risk of both dementia and cognitive impairment in older adults."²⁷

Strategies That May Help Modify Dementia Risk Factors

While it may seem daunting, modifying at least one of the 14 risk factors can help manage and even protect you from getting dementia in the future. According to the researchers:

"The potential for prevention is high and, overall, nearly half of dementias could theoretically be prevented by eliminating these 14 risk factors. These findings provide hope. Although change is difficult and some associations might be only partly causal, our new evidence synthesis shows how individuals can reduce their dementia risk ..."

What strategies can you adopt? In an interview for TIME, Dr. Gill Livingston, one of the study's authors, provides his recommendations:²⁸

Regular exercise — Staying physically active may be one of the best things you can do for your health. Based on available research, you'll be able to positively affect several risk factors right away. Exercise has been shown to reduce the risk of cardiovascular disease and cancer,²⁹ diabetes,³⁰ hypertension³¹ and cognitive function (especially in older adults).³²

The best kind of exercise you can do is moderate-intensity exercise. According to [my interview with cardiologist Dr. James O'Keefe](#), you get a dose-dependent decrease in mortality, depression, sarcopenia and more once you begin exercising. The remarkable thing about moderate-intensity exercise is you cannot overdo it. Moreover, high volumes of vigorous exercise won't benefit you more.

Protect your head — If you're into sports that come with an increased risk of injuries, such as riding a bicycle, boxing and other contact sports, always wear a proper-fitting helmet. Even one head injury can increase your risk of dementia by 1.25 times already, according to Penn Medicine News.³³

Protect other your senses — In relation to the point above, it would be wise to safeguard your other senses, such as your vision and hearing. For example, keeping the volume low when listening to music can preserve your hearing. Wearing ear plugs in loud environments can also help.

As for vision issues, a study noted that addressing cataracts right away can help reduce the risk of developing dementia.³⁴

Keep your brain busy — Livingston suggests that learning a new skill or hobby, reading a new book in an unfamiliar genre or traveling to an unfamiliar place can challenge your brain in positive ways.

Don't forget to socialize — Livingston says that one of the best ways to keep your brain busy is by talking to your family and friends. Social interactions keep your brain sharp as you have to communicate and converse about different topics.

Take care of your mental health — There are many ways you can cultivate your mental health and promote positivity in your life. Again, one good example is maintaining connections with your loved ones through regular communication. You can read my article "[How to Rewire Your Brain for Happiness](#)" for more information.

Quit smoking and drinking — Smoking cigarettes and drinking alcohol won't do anything good for your health. If you're having trouble quitting smoking, I recommend reading my article "[Quitting Smoking Starts in the Brain](#)," where I outline several mindfulness-based tips that can help you quit. On the other hand, if you absolutely must have a drink, do so in moderation.

Reduce your electromagnetic field (EMF) exposure — A 2023 study noted that radiofrequency fields at 1.8 to 3.5 GHz inhibited the electrical activity of neurons in vitro. Neurons play a key role in brain function, as they send and receive information to your brain for controlling movements. For practical strategies that can help reduce EMF exposure, read my article "[Ten New Studies Detail Health Risks of 5G](#)."

Optimize Your Mitochondrial Function Through Your Diet

In addition to the recommendations mentioned above, TIME also recommends eating a healthy diet.³⁵ I believe that this strategy may be one of the most important changes you can do, as it can have a long-lasting positive impact on your cellular health.

Start by addressing your diet, as the foods you eat are the fuel from which cellular energy is produced. The first step is [limiting your linoleic acid \(LA\) intake](#) to less than 5 grams per day. If you can get it down to less than 2 grams, that would be even better.

To achieve this goal, ditch all processed foods, and avoid all fast foods and most restaurant foods as most of them are loaded or cooked in LA-rich seed oils. Instead, focus on consuming whole and minimally processed foods.

Pay attention to your macronutrient intake, too. As explained in my previous articles, including "[A Surprising Reason Why You May Need More Carbs in Your Diet](#)," the ideal

fuel for your body is glucose, not fat. And again, it must come from whole, nutritious foods.

Ideally, keep your healthy fat intake around 35% of your daily calories. If your fat intake is too high, you'll prevent glucose from being burned in the mitochondria and force it into glycolysis instead, which is a highly inefficient way to produce energy.

Additional Alzheimer's Prevention Guidelines

In addition to optimizing your mitochondrial function, below are other prevention strategies that may help reduce your Alzheimer's risk include:

Avoid gluten and casein (primarily wheat and pasteurized dairy, but not dairy fat, such as butter) – Published research suggests that there's a link between gluten and neurodegenerative disease.³⁶ Gluten also makes your gut more permeable, which allows proteins to get into your bloodstream, where they don't belong. That then sensitizes your immune system and promotes inflammation and autoimmunity, both of which play a role in the development of Alzheimer's.

Optimize your gut flora by regularly eating fermented foods or taking a high potency, high-quality probiotic supplement. Lowering your LA intake is also important. High LA consumption impairs energy production, resulting in the proliferation of pathogenic gut bacteria that produce endotoxin.

Optimize your vitamin D level with safe sun exposure – Strong links between low levels of vitamin D in Alzheimer's patients and poor outcomes on cognitive tests have been revealed. In one 2023 study,³⁷ **vitamin D reduced dementia risk by 40%**.

Keep your fasting insulin levels below 3.

Eat a nutritious diet, rich in folate – Vegetables, without question, are your best form of folate, which you can get by eating plenty of fresh, raw veggies every day. Avoid supplements like folic acid, which is the inferior synthetic version of folate.

Avoid and eliminate mercury and aluminum from your body – Dental amalgam fillings, which are 50% mercury by weight, are one of the major sources of heavy metal toxicity. Make sure you use a biological dentist to have your amalgams removed. Sources of aluminum include antiperspirants, nonstick cookware and vaccine adjuvants.

Make sure your iron isn't elevated, and donate blood if it is – Studies show that iron accumulations in the brain tend to **concentrate in areas most affected by Alzheimer's**, namely the frontal cortex and hippocampus. Magnetic resonance imaging tests have also revealed elevated iron in brains affected by Alzheimer's.

Eat blueberries and other antioxidant-rich foods – Wild blueberries, which have high anthocyanin and antioxidant content, are known to guard against neurological diseases.

Avoid anticholinergics and statin drugs – Drugs that block acetylcholine, a nervous system neurotransmitter, have been shown to increase your risk of dementia. These drugs include certain nighttime pain relievers, antihistamines, sleep aids, certain antidepressants, medications to control incontinence and certain narcotic pain relievers.

Statin drugs are particularly problematic because they suppress the synthesis of cholesterol, deplete your brain of CoQ10 and neurotransmitter precursors, and prevent adequate delivery of essential fatty acids and fat-soluble antioxidants to your brain by inhibiting the production of the indispensable carrier biomolecule known as low-density lipoprotein.

Sources and References

- ¹ [CDC, "Minorities and Women Are at Greater Risk for Alzheimer's Disease" \(Archived\)](#)
- ² [UCL, "The Lancet Commission on Dementia Prevention, Intervention and Care"](#)
- ³ [The Lancet Commissions | Volume 404, ISSUE 10452, P572-628, August 10, 2024, Executive Summary](#)
- ⁴ [The Lancet Commissions | Volume 404, ISSUE 10452, P572-628, August 10, 2024, Specific Potentially Modifiable Risk Factors for Dementia](#)

- ⁵ Int J Geriatr Psychiatry. 2022 May; 37(5): 10.1002/gps.5711, Abstract
- ⁶ Neurobiol Aging. 2015 Apr; 36(4): 1751–1756, Abstract
- ⁷ Biol Psychiatry. 2023; 93: 802-809, Abstract
- ⁸ PLoS One. 2015; 10(3): e0118333, Abstract
- ⁹ JAMA Netw Open. 2022; 5e2217132, Abstract
- ¹⁰ JAMA Netw Open. 2023;6(1):e2251506, Abstract
- ¹¹ Alzheimers Dement (Amst). 2023; 15e12395, Abstract
- ¹² Br J Sports Med. 2022; 56: 701-709, Abstract
- ¹³ J Neurol Neurosurg Psychiatry. 2023; 94: 349-356, Abstract
- ¹⁴ JAMA. 2021 Apr 27; 325(16): 1640–1649, Discussion
- ¹⁵ Ageing Res Rev. 2019; 55100944, Abstract
- ¹⁶ Int J Mol Sci. 2022 Mar; 23(5): 2687, Abstract
- ^{17, 20} Lancet. 2020; 396: 413-446, Abstract
- ¹⁸ Neurosci Biobehav Rev. 2020; 115: 189-198, Abstract
- ¹⁹ Neurosci Biobehav Rev. 2021; 130: 301-313, Abstract
- ²¹ JAMA Netw Open. 2020; 3e2016084, Abstract
- ²² JAMA Netw Open. 2023; 6e2254771, Abstract
- ²³ Ageing Res Rev. 2015; 22: 39-57, Abstract
- ²⁴ Neurology. 2022; 99: e164-e175, Abstract
- ²⁵ Innovation (Camb). 2021; 2100147, Abstract
- ²⁶ Atmosphere (Basel). 2020; 111326, Abstract
- ²⁷ Ophthalmology. 2021 Aug;128(8):1135-1149, Abstract
- ^{28, 35} TIME, July 31, 2024
- ²⁹ International Journal of Obesity volume 46, pages1849–1858 (2022), Abstract
- ³⁰ BMC Public Health volume 23, Article number: 709 (2023), Abstract
- ³¹ Integr Blood Press Control. 2018; 11: 65–71, Abstract
- ³² Int J Environ Res Public Health. 2023 Jan; 20(2): 1088, Abstract
- ³³ Penn Medicine News, March 9, 2021
- ³⁴ JAMA Intern Med. 2022 Feb; 182(2): 134–141, Abstract
- ³⁶ Am J Lifestyle Med. 2022 Jan-Feb; 16(1): 32–35, Abstract
- ³⁷ Diagnosis, Assessment and Disease Monitoring, 2023; doi: 10.1002/dad2.12404