

Preventing Alzheimer's Disease

Looking to prevent dementia? These seven key strategies can help keep your brain healthy as you age and reduce your risk of Alzheimer's.



Can Alzheimer's and dementia be prevented?

Alzheimer's Disease is one of the biggest concerns many of us have as we get older. The thought of developing the disease can be a frightening prospect, especially if you've witnessed a loved one affected by dementia. While you may have been told that all you can do is hope for the best and wait for a pharmaceutical cure, the truth is much more encouraging. Promising research shows that you can reduce your risk of Alzheimer's and other dementias through a combination of simple but effective lifestyle changes.

By identify and controlling your personal risk factors and leading a brain-healthy lifestyle, you can maximize your chances of lifelong brain health and preserve your cognitive abilities. These steps may prevent the symptoms of Alzheimer's disease and slow down the process of deterioration.

Alzheimer's is a complex disease with multiple risk factors. Some, like your age and genetics, are outside your control. However, there are **seven pillars** for a brain-healthy lifestyle that are within your control:

1. Regular exercise
2. Social engagement
3. Healthy diet
4. Mental stimulation
5. Quality sleep
6. Stress management
7. Vascular health

Experts now believe that the risk of Alzheimer's is not limited to old age, but in fact can start in the brain long before symptoms are detected, often in middle age. That means that it's never too early to start taking care of your brain health. The more you strengthen each of the seven pillars in your daily life, the longer—and stronger—your brain will stay working and the more likely you'll be able to reduce your risk of developing Alzheimer's or another dementia.

Pillar #1: Regular exercise



According to the Alzheimer's Research & Prevention Foundation, [regular physical exercise](#) can reduce your risk of developing Alzheimer's disease by **up to 50 percent**. What's more, exercise can also slow further deterioration in those who have already started to develop cognitive problems. Exercise protects against Alzheimer's and other types of dementia by stimulating the brain's ability to maintain old connections as well as make new ones.

Aim for at least 150 minutes of moderate intensity exercise each week. The ideal plan involves a combination of cardio exercise and strength training. Good activities for beginners include walking and swimming.

Build muscle to pump up your brain. Moderate levels of weight and resistance training not only increase muscle mass, they help you maintain brain health. For those over 65, adding 2-3 strength sessions to your weekly routine may cut your risk of Alzheimer's in half.

Include balance and coordination exercises. Head injuries from falls are an increasing risk as you age, which in turn increase your risk for Alzheimer's disease and dementia. As well as protecting your head when you exercise (wearing a sports helmet when cycling, for example), balance and coordination exercises can help you stay agile and avoid spills. Try

yoga, Tai Chi, or exercises using balance balls.

Tips for starting and sticking with an exercise plan

If you've been inactive for a while, [starting an exercise program](#) can be intimidating. But remember: a little exercise is better than none. In fact, adding just modest amounts of physical activity to your weekly routine can have a profound effect on your health. Choose activities you enjoy and start small—a 10-minute walk a few times a day, for example—and allow yourself to gradually build up your momentum and self-confidence.

Pillar #2: Social engagement



Human beings are highly social creatures. We don't thrive in isolation, and neither do our brains. Staying socially engaged may even protect against Alzheimer's disease and dementia in later life, so make [developing and maintaining a strong network of friends](#) a priority.

You don't need to be a social butterfly or the life of the party, but you do need to regularly connect face-to-face with someone who cares about you and makes you feel heard. While

many of us become more isolated as we get older, it's never too late to meet others and develop new friendships:

- Volunteer
- Join a club or social group
- Visit your local community center or senior center
- Take group classes (such as at the gym or a community college)
- Get to know your neighbors
- Make a weekly date with friends
- Get out (go to the park, museums, and other public places)

Pillar #3: Healthy diet



In Alzheimer's disease, inflammation and insulin resistance injure neurons and inhibit communication between brain cells. Alzheimer's is sometimes described as "diabetes of the brain," and a growing body of research suggests a strong link between metabolic disorders and the signal processing systems. By [adjusting your eating habits](#), however, you can help reduce inflammation and protect your brain.

Manage your weight. Extra pounds are a risk factor for Alzheimer's disease and other types of dementia. A major study found that people who were overweight in midlife were twice as likely to develop Alzheimer's down the line, and those who were obese had three times the risk. [Losing weight](#) can go a long way to protecting your brain.

Cut down on sugar. [Sugary foods and refined carbs](#) such as white flour, white rice, and pasta can lead to dramatic spikes in blood sugar which inflame your brain. Watch out for hidden sugar in all kinds of packaged foods from cereals and bread to pasta sauce and low or no-fat products.

Enjoy a Mediterranean diet. Several epidemiological studies show that eating a [Mediterranean diet](#) dramatically reduces the risk of cognitive impairment and Alzheimer's disease. That means plenty of vegetables, beans, whole grains, fish and olive oil—and limited processed food.

Get plenty of omega-3 fats. Evidence suggests that the DHA found in these [healthy fats](#) may help prevent Alzheimer's disease and dementia by reducing beta-amyloid plaques. Food sources include cold-water fish such as salmon, tuna, trout, mackerel, seaweed, and sardines. You can also supplement with fish oil.

Stock up on fruit and vegetables. When it comes to fruits and vegetables, the more the better. Eat up across the color spectrum to maximize protective antioxidants and vitamins, including green leafy vegetables, berries, and cruciferous vegetables such as broccoli.

Cook at home often. By [cooking at home](#), you can ensure that you're eating fresh, wholesome meals that are high in brain-healthy nutrients and low in sugar, salt, unhealthy fat, and additives.

Drink only in moderation. While there appear to be brain benefits in consuming red wine in moderation, [heavy alcohol consumption](#) can dramatically raise the risk of Alzheimer's and accelerate brain aging.

Pillar #4: Mental stimulation



Those who [continue learning new things and challenging their brains](#) throughout life are less likely to develop Alzheimer's disease and dementia. In essence, you need to "use it or lose it." In the groundbreaking NIH ACTIVE study, older adults who received as few as 10 sessions of mental training not only improved their cognitive functioning in daily activities in the months after the training, but continued to show long-lasting improvements **10 years later**.

Activities involving multiple tasks or requiring communication, interaction, and organization offer the greatest protection. Set aside time each day to stimulate your brain:

Learn something new. Study a foreign language, practice a musical instrument, or learn to paint or sew. One of the best ways to take up a new hobby is to sign up for a class and then schedule regular times for practicing. The greater the novelty, complexity, and challenge, the greater the benefit.

Raise the bar for an existing activity. If you're not keen on learning something new, you can still challenge your brain by increasing your skills and knowledge of something you already do. For example, if you can play the piano and don't want to learn a new instrument,

commit to learning a new piece of music or improving how well you play your favorite piece.

Practice memorization techniques. For example, make up a sentence in which the first letter of each word represents the initial of what you want to remember, such as using the sentence “Every good boy does fine” to memorize the notes of the treble clef, E, G, B, D, and F. Creating rhymes and patterns can [strengthen your memory connections](#).

Enjoy strategy games, puzzles, and riddles. Brain teasers and strategy games provide a great mental workout and build your capacity to form and retain cognitive associations. Do a crossword puzzle, play board games, cards, or word and number games such as Scrabble or Sudoku.

Follow the road less traveled. Take a new route or eat with your non-dominant hand. Vary your habits regularly to create new brain pathways.

Pillar #5: Quality sleep



There are a number of links between poor sleep patterns and the development of

Alzheimer's and dementia. Some studies have emphasized [the importance of quality sleep](#) for flushing out toxins in the brain. Others have linked poor sleep to higher levels of beta-amyloid in the brain, a sticky protein that can further disrupt the deep sleep necessary for memory formation.

If nightly sleep deprivation is slowing your thinking and or affecting your mood, you may be at greater risk of developing symptoms of Alzheimer's disease. To help improve your sleep:

Establish a regular sleep schedule. Going to bed and getting up at the same time reinforces your [natural circadian rhythms](#). Your brain's clock responds to regularity.

Set the mood. Reserve your bed for sleep and sex, and ban television and computers from the bedroom (both are stimulating and may lead to [difficulties falling asleep](#)).

Create a relaxing bedtime ritual. Take a hot bath, do some light stretches, listen to relaxing music, or dim the lights. As it becomes habit, your nightly ritual will send a powerful signal to your brain that it's time for deep restorative sleep.

Quiet your inner chatter. When stress, anxiety, or [worrying](#) keeps you awake, get out of bed. Try reading or relaxing in another room for twenty minutes then hop back in.

Get screened for sleep apnea. If you've received complaints about your snoring, you may want to get tested for [sleep apnea](#), a potentially dangerous condition where breathing is disrupted during sleep. Treatment can make a huge difference in both your health and sleep quality.

Pillar #6: Stress management



Chronic or persistent stress can take a heavy toll on the brain, leading to shrinkage in a key memory area, hampering nerve cell growth, and increasing the risk of Alzheimer's disease and dementia. Yet simple [stress management](#) tools can minimize its harmful effects.

Breathe! Quiet your stress response with deep, abdominal breathing. Restorative breathing is powerful, simple, and free!

Schedule daily relaxation activities. Keeping stress under control requires regular effort. Learning [relaxation techniques](#) such as meditation, progressive muscle relaxation, or yoga can help you unwind and reverse the damaging effects of stress.

Nourish inner peace. Regular meditation, prayer, reflection, and religious practice may immunize you against the damaging effects of stress.

Make fun a priority. All work and no play is not good for your stress levels or your brain. Make time for [leisure activities that bring you joy](#), whether it be stargazing, playing the piano, or working on your bike.

Keep your sense of humor. This includes the ability to laugh at yourself. The [act of](#)

[laughing](#) helps your body fight stress.

Pillar #7: Vascular health



There's more and more evidence to indicate that what's good for your heart is also good for your brain. Maintaining your cardiovascular health can be crucial in lowering your risk for different types of dementia, including Alzheimer's disease and [vascular dementia](#). And of course, addressing heart-health issues can also help you to lower your risk for a future heart attack or stroke.

Control your blood pressure

[Hypertension or high blood pressure](#) is strongly associated with an increased risk of dementia. High blood pressure can damage tiny blood vessels in the parts of the brain responsible for cognition and memory. The latest American Heart Association guidelines class blood pressure readings of 130/80 mm Hg and above as the start of high blood pressure.

Check your blood pressure at home. A study in the Netherlands found that a large variation in blood pressure readings over a period of years was associated with an increased risk of dementia. Inexpensive monitors that wrap around your upper arm can help you keep track of your blood pressure throughout the day and pick up on any variations. Some devices even send the results to your phone so you can easily track your readings or share them with your doctor.

Make healthy diet and lifestyle changes. Exercising, trimming your waistline, lowering your stress, and reducing your salt, caffeine, and alcohol intake can all help to lower your blood pressure. Try to cut back on takeout, canned, and processed food which tend to be high in sodium and replace them with fresh vegetables and fruit.

The DASH diet for lowering blood pressure

The Dietary Approaches to Stop Hypertension, or DASH diet, is a specially designed eating plan to help you lower your blood pressure. When combined with a reduction in salt, the DASH diet may help lower your blood pressure without the need for medication. See “Get more help” below.

Take any medication your doctor recommends. Research from Johns Hopkins found that those prescribed antihypertensive medication to control high blood pressure lowered their dementia risk by about a third.

Don't ignore low blood pressure. While it affects far fewer of us, low blood pressure (hypotension) can also reduce blood flow to the brain. While the American Heart Association offers no specific measurement for when blood pressure is considered too low, symptoms such as dizziness, blurred vision, and unsteadiness when standing may indicate a problem.

Other vascular health tips

Watch your cholesterol levels. Studies also suggests there may be a connection between high cholesterol and the risk for Alzheimer's and dementia, especially having high cholesterol levels in mid-life. Improving your levels can be good for both your brain and your heart.

Stop smoking. Smoking is one of the most preventable risk factors for Alzheimer's disease and dementia. One study found that smokers over the age of 65 have a nearly 80% higher

risk of Alzheimer's than those who have never smoked. When you [stop smoking](#), the brain benefits from improved circulation almost immediately.

Women and Alzheimer's risk

Women are about twice as likely as men to develop Alzheimer's disease. Researchers believe this higher risk can be linked to a decrease in fertility and the onset of menopause in middle age. As a woman, the drop in estrogen not only triggers symptoms such as hot flashes and night sweats, but it can also affect your brain. Since estrogen protects brain cells from aging, a large decrease during menopause may make you more vulnerable to Alzheimer's later in life.

Hormone replacement therapy can carry risks, but there's evidence to suggest that taking supplemental estrogen before menopause may help lower your chances of developing dementia. Using the seven pillars in middle age can also be beneficial, especially [adopting a healthy diet](#). Eating foods rich in antioxidants such as fruit, leafy green vegetables, and nuts may help protect your brain, while flaxseeds, soy, nuts, red wine, and fruits such as strawberries, peaches, and apricots can help naturally boost estrogen levels.

While research into the menopause-Alzheimer's link is still at an early stage, the more preventative steps you can start taking in your 40s and 50s—or even earlier—the more you'll lower your risk of developing Alzheimer's as you age.



Get more help

[Assessing Risk for Alzheimer's Disease](#) - Current strategies for preventing Alzheimer's disease. (National Institute on Aging)

[High Blood Pressure and Dementia](#) - How high blood pressure can affect brain function and what you can do about it. (Alzheimer's Society)

[DASH Eating Plan: Lower Your Blood Pressure](#) (PDF) - Reducing high blood pressure through diet. (National Heart, Lung and Blood Institute)

[Can Menopause Jump-Start Alzheimer's?](#) - Examines the link between Alzheimer's and menopause. (Being Patient)

HelpGuide

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