

# Preventing Alzheimer's Disease

## What You Can Do to Prevent Dementia



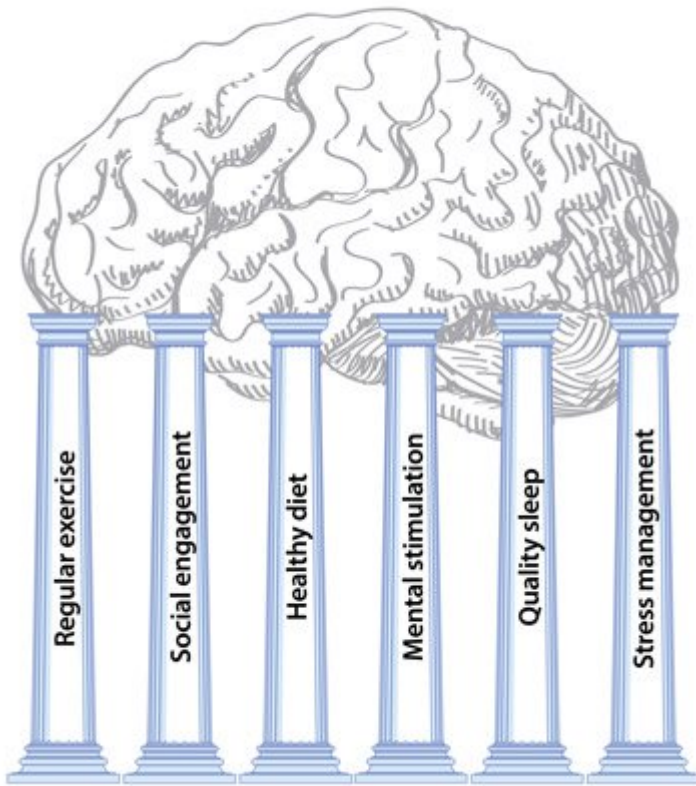
Alzheimer's Disease is one of the biggest concerns many of us have as we get older. While you may have been told that all you can do is hope for the best and wait for a pharmaceutical cure, the truth is much more encouraging. Promising research shows that you can reduce your risk of Alzheimer's and other dementias through a combination of simple but effective lifestyle changes. By leading a brain-healthy lifestyle, you may be able to prevent the symptoms of Alzheimer's disease and slow down, or even reverse, the process of deterioration.

## Can Alzheimer's and dementia be prevented?

The thought of developing Alzheimer's disease as you get older can be a frightening prospect, especially if you've witnessed a loved one affected by the disease. Researchers across the world are racing towards a cure, but as prevalence rates climb, their focus has broadened from treatment to prevention strategies. What they've discovered is that it may be possible to prevent or delay the symptoms of Alzheimer's disease and other dementias through a combination of healthy habits.

By identifying and controlling your personal risk factors, you can maximize your chances of lifelong brain health and take effective steps to preserve your cognitive abilities.

## The 6 Pillars of Alzheimer's Prevention



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

The more you strengthen each of the six 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 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. 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. It takes about 28 days for a new routine to become habit, so do your best to stick with it for a month and soon your exercise routine will feel natural, even something you miss if you skip a session.

## Protect your head

Head trauma at any point in life may increase your risk of Alzheimer's disease. This includes repeated hits in sports activities such as football, soccer, and boxing, or one-time injuries from a bicycle, skating, or motorcycle accident. Protect your brain by wearing properly fitting sports helmets and trip-proofing your environment as you exercise. Avoid activities that compete for your attention—like talking on your cell while walking or cycling.

## 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)
- Reach out over the phone or email
- Connect to others via social networks such as Facebook
- Get to know your neighbors
- Make a weekly date with friends
- Get out (go to the movies, 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.

**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.

**Avoid trans fats.** These fats can cause inflammation and produce free radicals—both of which are hard on the brain. Reduce your consumption by avoiding fast food, fried and packaged foods, and anything that contains "partially hydrogenated oils," even if it claims to be trans fat-free.

**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.

**Enjoy daily cups of tea.** Regular consumption of great tea may enhance memory and

mental alertness and slow brain aging. White and oolong teas are also particularly brain healthy. Drinking 2-4 cups daily has proven benefits. Although not as powerful as tea, coffee also confers brain benefits.

**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.

### Supplements that may help prevent dementia

Folic acid, vitamin B12, vitamin D, magnesium, and fish oil may help to preserve brain health. Studies of vitamin E, ginkgo biloba, coenzyme Q10, and turmeric have yielded less conclusive results, but may also be beneficial in preventing or delaying Alzheimer's and dementia symptoms.

Always talk to your doctor about possible medication interactions.

### 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, learn to paint or sew, or read the newspaper or a good book. 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. Or if you're a golfer, aim to lower your handicap.

**Practice memorization.** Start with something short, progressing to something a little more

involved, such as the 50 U.S. state capitals. Create rhymes and patterns to 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.

**Practice the 5 W's.** Observe and report like a crime detective. Keep a “Who, What, Where, When, and Why” list of your daily experiences. Capturing visual details keeps your neurons firing.

**Follow the road less traveled.** Take a new route, eat with your non-dominant hand, rearrange your computer file system. Vary your habits regularly to create new brain pathways.

## Pillar #5: Quality sleep

It's common for people with Alzheimer's disease to suffer from insomnia and other sleep problems. But new research suggests that disrupted sleep isn't just a symptom of Alzheimer's, but a possible risk factor. An increasing number of studies have linked poor sleep to higher levels of beta-amyloid, a sticky brain-clogging protein that in turn further interferes with sleep—especially with the deep sleep necessary for memory formation. Other studies emphasize the importance of uninterrupted sleep for flushing out brain toxins.

If nightly sleep deprivation is slowing your thinking and affecting your mood, you may be at greater risk of developing symptoms of Alzheimer's disease. The vast majority of adults need at least 8 hours of sleep per night.

**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.

**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.

**Be smart about napping.** While taking a nap can be a great way to recharge, especially for older adults, it can make insomnia worse. If insomnia is a problem for you, consider eliminating napping. If you must nap, do it in the early afternoon, and limit it to thirty minutes.

**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, write in your journal, 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 [negative internal dialogues](#) keep you awake, get out of bed. Try reading or relaxing in another room for twenty minutes then hop back in.

## 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. Make [relaxation a priority](#), whether it's a walk in the park, playtime with your dog, yoga, or a soothing bath.

**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.

## Other tips to reduce the risk of Alzheimer's

Just as what's good for the body is also good for the brain, so too is the converse: what's bad for the body is bad for the brain.

**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.

**Control blood pressure and cholesterol levels.** Both high blood pressure and high total cholesterol are associated with an increased risk of Alzheimer's disease and vascular dementia. Improving those numbers are good for your brain as well as your heart.

**Watch 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.

**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.

## Recommended reading

[Alzheimer's Disease](#) - A Guide to diagnosis, treatment, and caregiving. (Harvard Medical School Special Health Report)

[Assessing Risk for Alzheimer's Disease](#) - How genes, lifestyle, and environment play a part. (National Institute on Aging)

[Prevention and Risk of Alzheimer's and Dementia](#) - Latest research on Alzheimer's prevention, including the role of exercise, diet, and intellectual activity. (Alzheimer's Association)

[Preventing Alzheimer's Disease: What Do We Know?](#) Current strategies for preventing Alzheimer's disease. (National Institute on Aging)

Authors: Melinda Smith, M.A., Lawrence Robinson, and Jeanne Segal, Ph.D. Last updated: November 2018.