

Powerful Strategies

For Promoting Vitality and Decreasing Cognitive Decline

By Dr. Layne M. Garrett Audiologist



www.thebesthearing.com

Introductory Letter from Dr. Garrett

Aging is a natural, ongoing, universal and irreversible process. The one constant we can all count on as we age is that nothing stays the same!

Aging ensures change in the social, personal, cultural and economic elements of our lives. Everyday 10,000 people turn 65 years young. This trend is expected to continue for at least the next 15+ years. And it is



almost a guarantee that over the next 15 years science will continue to reduce the mortality rate and increase the average life expectancy. As a result, our health care system will be pushed to its capacity to deal with diseases such as Cancer, Diabetes, Cardiovascular, etc. Perhaps the most prevalent, most costly and most disabling of all diseases we will see sharply rise over the next decades is Dementia the mind-robbing mental disease that interrupts and interferes with every aspect of life. Dementia is not a normal part of aging.

Every 3-4 seconds another patient is diagnosed with Dementia. Rates of Dementia are estimated to triple in the next 30 years. Unlike the other diseases listed above, with Dementia the physical body is estimated to outlive the individual's mental capabilities by 10 or more years! There is no cure for this catastrophic disease, but there are treatments available, including several ways to decrease your risk of developing Dementia.

In this report, I will provide you with the *9 Powerful Strategies For Promoting Vitality and Decreasing Cognitive Decline* that I share with every patient. I encourage you to read through, share with family and friends, and get started on day 1 to make the positive change in your life that can help you maintain a healthy brain as you age and to stay engaged with your family, friends and community. Simple changes such as eating better, sleeping more, exercise, regular visits to your PCP and treating your hearing and visual losses as you age can all lead to a long, healthy life and significantly reduce your risk of developing Dementia.

Yours in Active Aging, Dr. Layne Garrett, AuD

1 Active Aging: Stay Young, Stay Smart, and Stay Engaged!

Active Aging – the process of optimizing opportunities for better health, continuing development of knowledge and increased security in order to maximize quality of life as you age. The word 'active' is used to describe a person's involvement with social, physical, economic, spiritual and civic affairs. We all share the same goal to maintain autonomy and independence as we age, and thus we must rely on preserving the tenants of interdependence (socialization and reliance on family and loved ones) and intergenerational solidarity (maintaining companionship with age-matched peers) to insure active aging.

Both Social Isolation and Depression are major risk factors for the development of Dementia, and both increase as we age. Being a lifelong learner and staying active is important to maintain a healthy, active brain and can also reduce your risk of cognitive decline and Dementia. Some studies have shown that social activities, larger social networks and a history of social contact are associated with better cognitive function and reduced risk for cognitive decline.



Tips for Active Aging include:

- Share a meal with family and friends 3-5 times per week
- Commit to an aerobics/exercise regimen
- Learn a new hobby each year
- Play an instrument (learn a new one if you already know how to play another)
- If you love to read, keep reading! If you don't read much, try to read a book every other month.
- Participate in classes at your local senior center.
- Volunteer at a local hospital, shelter, etc.
- Go back to school! Many local universities offer free tuition to individuals over the age of 65.

Visit your Primary Care Physician (not just when you are sick!)

One of your best resources for healthy aging is your primary care physician (PCP). As you age, the risk of developing diseases also increases. Successful treatment of any medical disease, including Dementia, is always most effective when treated early. Researchers at the Journal of Health Affairs found that patients with a PCP have better management of chronic diseases, lower overall health care costs, and a higher level of satisfaction with their care.

New screening tools are available for your PCP to help detect early-onset cognitive impairment associated with Dementia.

Your PCP can coordinate patient care all in one place. Within a PCP's practice, you have access to a wide spectrum of health services, including preventive care such as cancer screenings, chronic care for conditions like asthma, hypertension, and diabetes, and acute care for symptoms like cough, stomach pain, or high fever. By developing a relationship with a PCP, you ensure that other physicians and medical staff within the practice also know your medical history. This "health care team" can more easily detect patterns in your health and recommend lifestyle changes to prevent future complications requiring expensive specialty care.

For example, simple testing during a visit with your PCP can reveal health problems, such as early cognitive decline, that may go unnoticed, leading to more serious issues later in life.

Regularly visiting a PCP helps you look out for your health and well-being—not just for today, but also for the future.

Reasons for Regular PCP Visits:

- ✓ Identify risk factors for chronic diseases.
- ✓ Detect symptomless diseases.
- ✓ Get education on healthy lifestyle habits.
- ✓ Keep medical records updated.
- ✓ Establish a long-term relationship with a doctor who knows your medical history.



3 Eat Better

Nutrition plays a critical role in brain health, and research shows that the right diet can reduce the risk of Dementia by up to 50%. A 2024 study published in The Lancet Neurology confirms that nutrients found in whole foods help protect brain cells, reduce inflammation, and prevent the buildup of harmful plaques associated with Alzheimer's disease.

The Brain-Boosting Power of a Healthy Diet

- ◆ Mediterranean & MIND Diets Researchers from Harvard University (2024) found that individuals who closely followed a Mediterranean or MIND diet had a 40% lower risk of cognitive decline. These diets emphasize leafy greens, nuts, berries, fish, and olive oil, all rich in brain-protective compounds.
- ◆ The Gut-Brain Connection A new 2024 study from The Lancet reveals that a diverse gut microbiome is essential for cognitive function. Consuming fermented foods (yogurt, kimchi, sauerkraut), fiber-rich foods (bananas, oats, legumes), and polyphenols (dark chocolate, green tea, olive oil) supports gut health, which directly benefits the brain.
- ◆ Avoid Ultra-Processed Foods A 2023 study in JAMA Neurology found that diets high in ultra-processed foods (fast food, sugary drinks, processed meats) were linked to a 28% higher risk of Dementia. These foods contribute to inflammation and oxidative stress, damaging brain cells over time.



Best Foods for Brain Health

- Leafy Greens Spinach, kale, and
 Swiss chard contain vitamin K, which slows cognitive decline.
- Berries Rich in antioxidants that fight oxidative stress and improve memory.
- Nuts & Seeds Almonds, walnuts, and flaxseeds provide omega-3s that reduce brain inflammation.
- Fatty Fish Salmon, mackerel, and sardines are high in DHA, a critical nutrient for brain cell function.
- Turmeric & Spices Contain curcumin and polyphenols that protect against brain aging.

Small Diet Changes for Big Brain Benefits

- Swap processed snacks for a handful of nuts and berries.
- Add fermented foods to support gut-brain health.
- 🛮 Replace sugary drinks with green tea or water.

By prioritizing whole, nutrient-dense foods, you can protect your memory, reduce inflammation, and lower your risk of Dementia—one meal at a time.

Treat Your Hearing Loss

Recent research has found that hearing loss can increase the risk of developing Dementia by 200-500%. A report from researchers at Johns Hopkins Medical Center and the National Institute on Aging found that individuals with hearing loss, when compared to those with normal hearing, are at a significantly higher risk of developing Dementia over time.

The more severe the hearing loss, the greater the likelihood of developing this memory-robbing disease.

Dr. Frank Lin (Johns Hopkins Medical Center) states:

"A lot of people ignore hearing loss because it's such a slow and insidious process as we age.

Even if people feel as if they are not affected, we're showing that it may well be a more serious problem."

Three Key Risk Factors Linking Hearing Loss to Dementia:

1 Social Isolation – People with hearing loss often withdraw from social situations due to embarrassment, fear of making mistakes in conversations, or feeling left out. Even mild hearing impairment can lead to reduced engagement and increased loneliness, both of which are risk factors for Dementia.

Cerebral Atrophy (Brain Shrinkage) –

Scientific studies have demonstrated that hearing impairment accelerates brain atrophy. The most significant reductions in brain volume occur in areas responsible for memory, speech, and language, making hearing loss a serious concern for cognitive health.

3 Cognitive Overload (Straining to Hear) – Hearing loss forces the brain to work harder to fill in missing sounds and words, leading

to fill in missing sounds and words, leading to mental fatigue. This excess strain can negatively impact cognitive function.

Hearing loss is not just a normal part of aging —it's a serious issue that should be treated early. Research shows that up to 50% of people aged 60-70 and 66% of people over 70 experience some degree of hearing loss.

Dr. Doraiswamy (Neuropsychologist, Duke University) states:

"The benefits of correcting hearing loss on cognition are twice as large as the benefits from any cognitive-enhancing drugs now on the market. It should be the first thing we focus on."



5

Get Your Eyes Checked

Untreated vision problems can significantly increase the risk of Alzheimer's and other forms of Dementia. Research published in the American Journal of Epidemiology found that elderly individuals with poor vision are far more likely to develop Dementia than those with healthy eyesight.

According to Dr. Mary Rogers of the University of Michigan,

"Visual problems can have serious consequences and are very common among the elderly, but many of them are not seeking treatment."



Like hearing loss, vision impairment reduces social and physical activity, which are essential ror maintaining brain health. Failing to treat vision problems can accelerate cognitive decline, whereas early intervention may help delay the onset of Dementia.

The Link Between Vision Loss and Dementia

- A study from the American Optometric Association found that significant near-vision loss in older adults may correlate with an increased risk of Dementia.
- Research from the University of Bordeaux in France discovered that moderate to severe near-vision loss can double the chances of developing Dementia.

Take Action to Preserve Your Brain Health

- Schedule regular eye exams to detect and treat vision changes early.
- Use corrective lenses or treatments to prevent unnecessary strain on your brain
- Maintain a healthy lifestyle that supports eye health, including a diet rich in antioxidants and omega-3s.

By prioritizing good vision care, you're also prioritizing your long-term cognitive well-being. Don't let preventable vision problems put your brain at risk—get your eyes checked today!

Exercise-- Good for Body AND Mind!

Regular exercise isn't just good for your heart and muscles—it's one of the most powerful tools for protecting your brain. Studies show that staying active can significantly lower the risk of developing Dementia, improve memory, and even increase brain volume.

Latest Research on Exercise and Brain Health:

- A 2023 study published in the Journal of Alzheimer's Disease found that individuals who engaged in regular physical activity had a 40% lower risk of developing Dementia compared to those with a sedentary lifestyle.
- The American Academy of Neurology recently confirmed that regular aerobic activity slows cognitive decline even in those already experiencing mild memory issues.
- A 2023 Study from University of Sydney (Published in JAMA Neurology) found that strength training (resistance exercise) is more effective than aerobic exercise in preventing cognitive decline. Participants who did resistance training twice a week had a 79% lower risk of Alzheimer's compared to those who only walked.

How Much Exercise Do You Need?

The World Health Organization (WHO) and the Centers for Disease Control and Prevention

(CDC) recommend a minimum of 150 minutes per week (or 30 minutes per day, 5 days a week) of moderate-intensity aerobic exercise to support brain and body health.

For added benefits, include musclestrengthening activities at least twice per week to improve balance, coordination, and overall brain function.

Endurance & Cardiovascular Exercises

- Brisk Walking (15-30 min, 3-5 times per week)
- Swimming & Water Aerobics
- Cycling (Stationary or Outdoor)
- Dancing

Strength & Resistance Training

- Bodyweight exercises (squats, lunges, push-ups)
- Weightlifting with light dumbbells or resistance bands
- Yoga or Pilates

Mind-Body Exercises for Cognitive Longevity

- Tai Chi & Qigong
- Meditative Walking



7 Stop Smoking and Limit Alcohol

Smoking and excessive alcohol consumption are two of the most preventable risk factors for Dementia. Research shows that both habits can accelerate brain shrinkage, impair memory, and increase cognitive decline. However, making lifestyle changes—such as quitting smoking and moderating alcohol intake—can significantly lower your riskand support long-term brain health

The Link Between Smoking and Dementia

Studies from the World Health Organization (WHO) and Alzheimer's Society confirm that smokers are 30-40% more likely to develop Dementia than non-smokers. Smoking damages blood vessels and reduces oxygen supply to the brain, leading to inflammation, oxidative stress, and an increased buildup of beta-amyloid plaques, which are strongly associated with Alzheimer's disease.

The good news? Quitting smoking at any age can slow cognitive decline and improve brain function. Within weeksof quitting, blood circulation to the brain improves, and within years, the risk of Dementia begins to drop toward that of a non-smoker.

Alcohol and Brain Function

Excessive alcohol consumption can cause long-term brain damage. A 2022 study in The Lancet Public Health found that heavy drinkers (more than 14 drinks per week) had a threefold increase in Dementia risk. Chronic alcohol use damages neurons, disrupts neurotransmitter function, and shrinks the hippocampus—the area of the brain responsible for memory.

Even moderate drinking can contribute to cognitive decline. A 2019 study in the *British Medical Journal* found that individuals consuming seven or more alcoholic drinks per week had a smaller brain volume than non-drinkers.

Take Action Today

- Quit smoking—your brain begins to recover within weeks.
- Limit alcohol to recommended levels (no more than 1 drink per day for women, 2 for men).
- Choose brain-friendly alternatives like herbal teas, mocktails, or nicotine-free strategies.



Reduce Stress

In today's fast-paced world, stress has become a constant in many people's lives. However, chronic stress doesn't just affect your mood—it significantly increases the risk of cognitive decline and Dementia.

Managing stress effectively is one of the most impactful ways to protect brain function, enhance memory, and slow the aging process.

The Science Behind Stress and Dementia

Stress triggers the release of cortisol, a hormone that, when chronically elevated, can cause inflammation, impair memory, and shrink the hippocampus—the brain's key memory center.

A study from the Rotman Research Institute in Canada found that individuals with mild cognitive impairment who reported high anxiety levels were 135% more likely to develop Alzheimer's. Similarly, a 2023 study published in JAMA Psychiatry confirmed that persistent stress and anxiety accelerate amyloid plaque buildup, a hallmark of Alzheimer's disease.

The good news? Stress management can slow or even reverse these effects, helping to keep your brain resilient as you age.



Proven Techniques to Reduce Stress and Support Brain Health

- Deep Breathing & Meditation
 Controlled breathing exercises lower cortisol, improve focus, and calm the nervous system. A study from Beth Israel Deaconess Medical Center found that meditation and yoga slow brain atrophy and improve neural connectivity, making them powerful tools for brain health.
- Daily Relaxation & Nature Exposure
 Regular relaxation—whether it's a walk
 in the park, listening to music, or
 spending time in nature—has been
 shown to lower stress hormones and
 enhance cognitive function. A 2022
 study in Nature Aging found that
 people who spend time outdoors have
 a lower risk of cognitive decline.
- Prioritize Joy & Social Connection
 Laughter and social interactions
 stimulate endorphins, reduce stress,
 and support emotional well-being.
 Engaging in hobbies, creative activities,
 and play protects the brain from
 stress-induced damage.
- Quality Sleep Poor sleep and chronic stress go hand in hand. A Harvard Medical School study found that individuals who sleep less than 6 hours per night are at a 30% higher risk of developing Dementia. Prioritizing deep, restorative sleep is essential for stress reduction and cognitive health.



Sleep is one of the most powerful, yet often overlooked, factors in preventing cognitive decline. It plays a crucial role in memory consolidation, emotional regulation, and the removal of harmful waste from the brain.

Research has consistently shown that poor sleep quality increases the risk of Alzheimer's disease and other forms of Dementia.

The Science of Sleep and Brain Health

According to the Centers for Disease Control and Prevention (CDC), insufficient sleep is a public health epidemic. It has been directly linked to:

- ✓ Cognitive dysfunction Impaired memory, slower processing speed, and reduced problemsolving abilities.
- ✓ Depression and Anxiety Disrupts mood regulation and increases stress hormones.
- ✓ Increased Cortisol Levels Chronic stress from poor sleep shrinks the hippocampus, a key brain region for memory.
- ✓ Type II Diabetes & Weight Gain Disrupted sleep patterns affect metabolism and insulin resistance, both of which contribute to brain inflammation and a higher risk of Dementia.

The most concerning finding? Chronic sleep deprivation increases the buildup of amyloid-beta, a toxic protein linked to Alzheimer's disease.

The Glymphatic System: How Sleep "Cleans" the Brain

Research from the University of Rochester Medical Center identified a waste-clearing system in the brain called the glymphatic system. This system is ten times more active during sleep than when awake, helping to flush out harmful proteins like amyloid-beta, which contribute to Alzheimer's.

Without enough sleep, these toxins accumulate, increasing the risk of neurodegeneration, brain shrinkage, and memory loss. This means getting quality sleep is one of the most effective ways to protect your brain from cognitive decline.

The quantity and quality of your sleep both matter. While eight hours is the general recommendation, research suggests that deep, restorative sleep is more important than the number of hours slept.

How to Optimize Sleep for Brain Health

- ✓ Prioritize Deep Sleep The most effective brain-cleansing occurs during deep sleep (slow-wave sleep).
- ✓ Follow a Consistent Sleep Schedule Go to bed and wake up at the same time every day to regulate circadian rhythms.
- ✓ Try Segmenting Sleep If you can't sleep for 8 continuous hours, consider sleeping in 4-hour chunks or taking naps. This is similar to ancient sleep patterns and can still be restorative.
- ✓ Avoid Stimulants Before Bed Reduce caffeine, alcohol, and blue light exposure at least 2 hours before bedtimeto improve sleep quality.
- ✓ Create a Sleep-Friendly Environment Keep the bedroom cool, dark, and quiet to enhance melatonin production.

Debunking Myths About Dementia Prevention

Myth #1: Dementia is Just a Normal Part of Aging

Truth: While some memory changes are common with age, Dementia is not a normal part of aging. According to the World Health Organization (WHO), Dementia is caused by brain diseases like Alzheimer's, vascular Dementia, and Lewy body Dementia, which lead to significant cognitive decline beyond typical forgetfulness. Many people maintain sharp memory and cognitive abilities well into their 80s and 90s with the right lifestyle choices.

Myth #2: There's Nothing You Can Do to Prevent Dementia—It's All Genetics

Truth: While genetics can play a role, lifestyle factors account for up to 40% of Dementia risk, according to a 2024 study published in The Lancet Neurology. Research shows that exercise, nutrition, social engagement, and sleep quality can drastically reduce your likelihood of developing cognitive decline—even if you have a family history of Dementia.

Myth #3: Supplements and "Brain-Boosting" Pills Can Prevent Dementia

Truth: There is no scientific evidence that supplements alone can prevent or reverse Dementia. Many so-called "brain-boosting" supplements, including fish oil, ginkgo biloba, and memory pills, have not been proven effective in clinical trials. The American Academy of Neurology (2024) warns that most supplements lack regulation and may provide false hope.

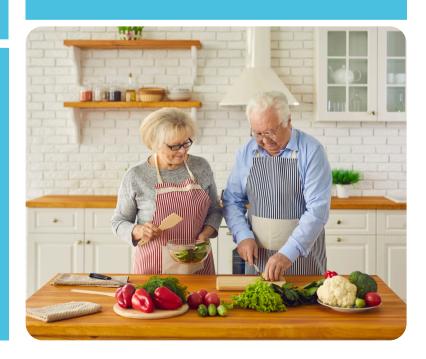
Myth #4: If You're Already Forgetful, You're Definitely Developing Dementia

Truth: Occasional forgetfulness does not mean you have Dementia. Normal agerelated memory loss includes misplacing items or forgetting names occasionally but remembering them later. However, Dementia is characterized by persistent and worsening cognitive issues that interfere with daily life, such as:

- Getting lost in familiar places.
- Forgetting how to do routine tasks.
 - Difficulty following conversations.

Myth #5: Once You Hit a Certain Age, It's Too Late to Improve Brain Health

Truth: It's never too late to take steps toward Dementia prevention! Studies from Harvard Medical School (2024)show that people who adopt brain-healthy habits in their 60s and 70s can still significantly reduce their risk of cognitive decline.



13 Time
Best of State
Winner!



www.thebesthearing.com

American Fork 343 S 500 E American Fork, UT 84003 801-763-0724 Spanish Fork 642 E Kirby Lane #102 Spanish Fork, UT 84660 801-798-7210



Our Hearing Care Professionals Seth Austin, Levi Lundquist, Jessica Nelson, Layne Garrett