# Lifestyle choices will protect your brain!

Researchers across the world are racing towards a cure for Alzheimer's disease. 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 healthful habits. While Alzheimer's disease accounts for 50 percent of dementia cases, vascular dementia accounts for up to 40 percent in older adults, and there is much you can do to prevent this type of dementia.

It's never too early to start boosting your brain reserves, but whatever your age, there are steps you can take to keep your brain healthy.

### The 6 pillars of a brain-healthy lifestyle

The health of your brain, like the health of your body, depends on many factors.

While some factors, such as your genes, are out of your control, many powerful lifestyle factors are within your sphere of influence.

The six pillars of a brain-healthy lifestyle are:

- 1. Regular exercise
- 2. Healthy diet
- 3. Mental stimulation
- 4. Quality sleep
- 5. Stress management
- 6. An active social life

The more you strengthen each of the six pillars in your daily life, the healthier and hardier your brain will be. When you lead a brain-healthy lifestyle, your brain will stay working stronger...longer.

Alzheimer's & dementia prevention pillar #1: Regular exercise The benefits of exercise

In addition to protecting against Alzheimer's and dementia, regular exercise:

- Reduces stress
- Boosts mood
- Improves memory
- Increases energy

According to the Alzheimer's Research & Prevention Foundation, physical exercise reduces your risk of developing Alzheimer's disease by 50 percent.

Regular exercise can also slow further deterioration in those who have already started to develop cognitive problems.

If you've been inactive for a while, starting an exercise program can be intimidating. But you don't have to take up jogging or sign up for a gym membership. Look for small ways to add more movement into your day. Park at the far end of the parking lot, take the stairs, carry your own groceries, or walk around the block or pace while talking on your cell phone.

#### Tips for getting started and sticking with your exercise plan:

- Aim for at least 30 minutes of aerobic exercise five times per week. Try walking, swimming, or any other activity that gets your heart rate up. Even routine activities such as gardening, cleaning, or doing laundry count as exercise.
- **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. Combining aerobics and strength training is better than either activity alone. 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 grow older, 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 discs or balance balls.
- Stick with it for a month. It takes approximately 28 days for a new routine to become habit. Once you're over this hump, keeping up your exercise routine will feel natural. In the meantime, write realistic goals on a workout calendar and post it on the fridge. Build in frequent rewards, and within no time, the feel-good endorphins from regular exercise will help you forget the remote...and head out the door.
- Protect your head. Studies suggest that head trauma at any point in life significantly increases 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, buckling your seatbelt, and trip-proofing your environment. Avoid activities that compete for your attention—like talking on your cell while driving. A moment's distraction can lead to a brain-injuring thud!

# Alzheimer's & dementia prevention pillar #2: Healthy diet Eat to protect glial cells.

Researchers believe that glial cells may help remove debris and toxins from the brain that can contribute to Alzheimer's disease. Consuming foods such as ginger, green tea, fatty fish, soy products, blueberries, and other dark berries may protect these important cells from damage.

Just like the rest of your body, your brain needs a nutritious diet to operate at its best. Focus on eating plenty of fresh fruit and vegetables, lean protein, and healthy fats.

Eating habits that reduce inflammation and provide a steady supply of fuel are best. These food tips will keep you protected:

- Follow a Mediterranean diet. Eating a heart-healthy Mediterranean diet rich in fish, nuts, whole grains, olive oil, and abundant fresh produce. Treat yourself to the occasional glass of red wine and square of dark chocolate.
- **Avoid trans fats and saturated fats.** Reduce your consumption by avoiding full-fat dairy products, red meat, fast food, fried foods, and packaged and processed foods.
- **Eat a heart-healthy diet.** What's good for the heart is also good for the brain, so by reducing your risk of heart disease, you also lower your risk of Alzheimer's disease.
- **Get plenty of omega-3 fats.** Evidence suggests that omega-3 fatty acids may help prevent Alzheimer's disease and dementia. Food sources include cold-water fish such as salmon, tuna, trout, mackerel, and sardines. You can also supplement with fish oil.
- Eat 4-6 small meals throughout the day, rather than 3 large meals. Eating at regular intervals helps to maintain consistent blood sugar levels. Also avoid refined carbohydrates high in sugar and white flour, which rapidly spike glucose levels and inflame your brain.
- **Eat across the rainbow.** Emphasize fruits and vegetables across the color spectrum to maximize protective antioxidants and vitamins. Daily servings of berries and green leafy vegetables should be part of your brain-protective regimen.
- **Enjoy daily cups of tea.** Regular consumption of green 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.

#### Give up smoking and drink in moderation

Smoking and heavy drinking are two of the most preventable risk factors for Alzheimer's disease. Not only does smoking increase the odds for those over 65 by nearly 79 percent, researchers at Miami's Mt. Sinai Medical Center warn that a combination of these two behaviors reduces the age of Alzheimer's onset by six to seven years.

When you stop smoking, the brain benefits from improved circulation almost immediately, no matter your age. However, brain changes from alcohol abuse can only be reversed in their early stages.

#### What about supplements?

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

Talk to your doctor about medication interactions, and review current literature to make a personal decision about the costs and benefits of dietary supplements.

## Alzheimer's & dementia prevention pillar #3: Mental stimulation

Those who continue learning new things throughout life and challenging their brains are less likely to develop Alzheimer's disease and dementia, so make it a point to stay mentally active. In essence, you need to "use it or lose it."

Activities involving multiple tasks or requiring communication, interaction, and organization offer the greatest protection. Set aside time each day to stimulate your brain. Cross-training with these brain-boosting activities will help keep you mentally sharp:

- **Learn something new.** Study a foreign language, learn sign language, practice a musical instrument, read the newspaper or a good book, or take up a new hobby. The greater the novelty and challenge, the larger the deposit in your brain reserves.
- **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 or cards, or work 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.

# Alzheimer's & dementia prevention pillar #4: Quality sleep

Your brain needs regular, restful sleep in order to function at optimum capacity. Sleep deprivation not only leaves you cranky and tired, but impairs your ability to think, problem-solve, and process, store, and recall information. Deep, dreamy sleep is critical for memory formation and retention. 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. Any less, and productivity and creativity suffers.

### Tips to help you combat insomnia and catch up on your Z's

- **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.

### Alzheimer's & dementia prevention #5: Stress management

Stress that is chronic or severe takes a heavy toll on the brain, leading to shrinkage in a key memory area of the brain known as the hippocampus, hampering nerve cell growth, and increasing your risk of Alzheimer's disease and dementia. Yet simple daily tools can minimize its harmful effects.

#### **Get your stress levels in check with these proven techniques**

- **Breathe!** Stress alters your breathing rate and impacts oxygen levels in the brain. 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.** Most scientists acknowledge a strong mindbody connection, and various studies associate spirituality with better brain health. Regular meditation, prayer, reflection, and religious practice may immunize you against the damaging effects of stress.

## Alzheimer's & dementia prevention #6: An active social life

Human beings are highly social creatures. We don't thrive in isolation, and neither do our brains. Studies show that the more connected we are, the better we fare on tests of memory and cognition. Staying socially active may even protect against Alzheimer's disease and dementia, so make your social life a priority.

Oftentimes, we become more isolated as we get older, but there are many ways to keep your support system strong and develop new relationships:

- 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)