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## Alzheimer's & Dementia Prevention How to Reduce Your Risk and Protect Your Brain

Alzheimer's disease (AD) and other types of dementia are one of the most devastating and costly public health challenges of our time. However, little progress has been made in developing truly effective treatment strategies. Frustrated by the lack of success in treating AD and dementia, the field has focused on early prevention through identifying modifiable risk factors for the disease. Below is a list of lifestyle choices that may reduce cognitive loss and your risk of dementia:

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



Aspects of healthy living that may reduce your risk of cognitive loss

For additional information, please visit:

- Helpguide — <http://www.helpguide.org/topics/alzheimers-dementia.htm>
- Mount Sinai ADRC — <http://www.mssm.edu/adrc>

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## Lifestyle choices

### #1: Regular exercise

#### The benefits of exercise

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

Regular exercise is widely accepted and recommended to maintain optimum physical health and prevent various medical conditions, such as cardiovascular disease and diabetes. Over the last decade, findings from animal and human studies suggest potential protective effects of exercise on the brain. Cognitive benefits of exercise are also reported in a growing number of observational studies in older adults. Overall, exercise has positive effects on cognition, brain structure, and neuronal network activity in the elderly population. Below is a list of tips for starting and maintaining your exercise plan. Remember to talk to your health care provider before beginning an exercise program.

***Get your heart rate up.*** Engage in aerobic exercise, such as walking, swimming, or any other exercise that gets your heart rate up for at least 30 minutes five times per week.

***Increase your muscle mass.*** Add 2-3 strength training sessions to your weekly exercise routine; it is believed that combining strength training and aerobic exercise helps reduce the risk of developing AD by 50% for individuals over 65.

***Include balance and coordination exercises.*** Try exercises that help you stay agile and avoid falls, such as yoga, Tai Chi; researchers report that balance and coordination exercise can lower the risk of falls, and thereby lower the risk for AD and dementia.

***Stick with it for a month.*** Create a realistic workout schedule and make it become a natural habit.

***Avoid head trauma.*** Protect your brain by wearing helmets, buckling your seatbelt, and maintaining good attention while walking/driving; head injury is a risk factor for dementia.

### #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

Your brain, like the rest of your body, requires a nutritious diet to operate at its best. Eating abundant fresh fruit and vegetables, lean protein, and healthy fats can help reduce inflammation and provide a steady supply of fuel to your brain. Below is a list of tips that help you maintain a healthy diet:

***Eat a heart-healthy diet.*** Heart disease is a risk factor for AD and dementia, so eating what's good for your heart may also be good for your brain.

***Follow a Mediterranean diet.*** Observational studies support eating a diet that is rich in fish, nuts, whole grains, olive oil, and plenty of fresh produce with an occasional glass of red wine and square of dark chocolate.

***Avoid trans fats and saturated fats.*** Reduce your consumption of full-fat dairy products, red meat, fast food, fried foods, and packaged/processed foods.

**Get plenty of omega-3 fats.** Food sources that contain omega-3 fatty acids including cold-water fish, are associated with lower risk of cognitive loss.

**Eat across the rainbow.** Focus on eating fruits and vegetables across the color spectrum to maximize protective antioxidants and vitamins; make daily consumption of berries and green leafy vegetables part of your brain-protective regimen.

**Take your dietary supplements.** Talk to your doctor about whether dietary supplements, such as multi-vitamins, folic acid, vitamin B12, vitamin D, magnesium, and fish oil, might be appropriate for you.

**Eat at regular intervals.** Eating 4-6 small meals throughout the day, rather than 3 large meals can help maintain consistent blood sugar levels.

### #3: An Active Social Life

Human beings are highly social creatures who do not thrive in isolation. Studies report that the



more connected we are, the better we perform on tests of memory and thinking ability. Thus, staying socially active may reduce the risk of AD and dementia. Below is a list of tips that help you keep a strong support system and develop new relationships:

- **Volunteer**
- **Join a club or social group**
- **Visit your local community center or senior center** (e.g. 92nd street Y)
- **Take group classes** (e.g. at the gym or a community college)
- **Reach out over the phone or email**
- **Connect to others through social networks** (e.g. Facebook)
- **Get to know your neighbors**
- **Make a weekly date with friends** (e.g. find something that you both enjoy doing )
- **Get more active at your place of worship**

### #4: Mental Stimulation



Individuals who continue learning new things and challenging their brain throughout life may have lower risk of developing cognitive loss and dementia. In essence, you either "use it or lose it." Below is a list of activities that help you stay mentally sharp:

**Learn something new.** Engage in novel and challenging activities, such as studying a new language, practicing a musical instrument, and reading newspapers or books.

**Get out of the house.** Go to museums, take classes, and attend concerts/lectures.

**Enjoy brain teasers.** Crossword puzzles, chess, or word games are great mental exercises.

## Lifestyle Choices

**Practice the 5 W's.** Evoke neuronal firing in the brain by keeping a "who, what, where, when, and why" list of your daily experiences.

**Change your habits regularly.** Try to do old things a new way, such as going to new restaurants, walking home a different way, getting dressed in a different order, and eating with your non-dominant hand.

### #5: Quality Sleep



Regular and restful sleep is required for the brain to function at its optimum capacity. Sleep deprivation is related to problems with thinking ability, problem-solving, and memory. Deep and dreamy sleep is essential for brain health. The majority of adults need up to eight hours of sleep a day. Below is a list of tips that help you improve your quality of sleep:

**Establish a regular sleep schedule.** Try to go to bed and get up at the same time every day.

**Be smart about napping.** If you have insomnia, try to eliminate napping; however, if you must nap, do it in the early afternoon and limit it to 30 minutes.

**Set the mood.** Remove stimuli (e.g. television and computers) from your bedroom; reserve your bed for sleep only.

**Create a relaxing bedtime ritual.** Try taking a hot bath or doing some light stretches before you go to sleep; when your nightly ritual becomes a habit, it will send a signal to your brain that "it's time to sleep."

**Quiet your inner chatter.** If your stress, anxiety, or negative internal dialogues keep you awake, go read, write down what is on your mind, or relax in another room for 20 minutes then go back to bed.

### #6: Stress Management



Chronic or severe stress has a negative impact on the brain, causing shrinkage in key memory regions of the brain (i.e. hippocampus), hampering nerve cell growth, and increasing the risk of developing AD and dementia. Below is a list of tips that help keep your stress levels in check:

**Monitor your mood.** Mood symptoms, such as depression and anxiety, can affect your brain functioning.

**Take a deep breath.** Stress can change breathing rates and oxygen levels in the brain; deep, abdominal breathing is a powerful and simple method to reduce your stress level.

**Schedule daily relaxation activities.** Make relaxation a priority and put an honest effort to keep your stress level under control; it can be a walk in the park, playtime with your dog, exercise (e.g. yoga), or taking a hot bath.

**Nourish inner peace.** Regular meditation, prayer, reflection, and religious practice are activities that help immunize you against the negative effects of stress.