

How To Keep Your Brain Healthy and Lower Your Risk of Cognitive Decline

What Does Aging Mean to You? Does it mean you will get forgetful, vulnerable, frail, sick, lonely, a burden? Or does it mean leading an active, vital life engaging with others, your church and community?

Most of the time people don't think about brain health until they are 65 and beginning to notice signs of memory change. What we do throughout our lives, our everyday choices, matters when it comes to a healthy memory and a healthy brain later in life.

Studies have come to 2 conclusions: 1) changes that occur with aging do not inevitably lead to disease, such as dementia. A number of disorders that typically occur in old age are a result of disease processes, not normal aging. 2) we all age differently.

Healthy lifestyle choices may help you maintain a healthy body and brain and may reduce your risk for cognitive decline. Studies presented at the Alzheimer's Association International Conference (AAIC) in 2019 showed that incorporating healthy lifestyle changes now can reduce the risk of Alzheimer's by 60 percent! A separate study showed that lifestyle choices can lower the risk even *for those who are genetically pre-disposed to the disease.*

Aging well depends on your:

- Lifestyle
- Environment
- Genes

With age-related changes in learning and memory you may find:

- Increased difficulty finding words. In young adults this can happen once a week; in older adults once a day.
- More problems in multi-tasking. Multi-tasking causes our brain to rapidly switch to different activities, which is not normal for our brains to do. It splits our attention and makes it harder to remember things. Try to minimize the amount of multi-tasking you do.
- Mild decreases in ability to pay attention.
- Walking into another room and forgetting what you were doing.
- Increased time needed to remember names.

But you can still:

- Learn new things
- Create new memories
- Improve vocabulary and language skills

There are some potentially reversible causes of memory loss:

- Poor nutrition and/or dehydration
- Thyroid deficiency
- Medications
- Depression
- Sleep deprivation or sleep apnea
- Inattention or being distracted. Studies have shown that as we get older we tend to not pay attention as closely as we did when we were younger so we have a harder time remembering things that have occurred.

What Can We Do to Protect Brain Health? Focus on:

- Diet & nutrition
- Exercise & physical health
- Cognitive activity
- Attend to medical health and partnering with your doctor
- Sleep & relaxation
- Social engagement is vital to protecting our brain health.

Diet and Nutrition-

- A Mediterranean-like diet is recognized by the World Health Organization as a healthy and sustainable dietary pattern and may reduce the risk of cognitive decline. The main components of a Mediterranean diet include:

1. Daily consumption of vegetables, fruits, whole grains and healthy fats
2. Weekly intake of fish, poultry, beans and eggs
3. Moderate portions of dairy products
4. Limited intake of red meat
5. Limit alcohol consumption: Limit yourself to one glass of wine per day. A standard glass of wine is 5 oz.

Portion Sizes-

Fill one-half of your plate w/ fruits and veggies, ¼ plate w/protein, and ¼ plate with whole grain foods.

When determining serving size a clenched fist is about 1 cup; a thumb is about 2 tbsp, or a serving of peanut butter; the tip of your finger is about 1 tsp, your palm is about the size of 1 serving of meat or 3-4 oz., the front of a clenched fist is about ½ cup of pasta or 1 serving.

Additional recommendations-

It is also recommended that you:

- a have moderate caloric intake;
- increase Omega 3 fatty acids, such as fish & seafood, nuts & seeds, and plant oils such as soybean, canola, & olive oil;
- increase antioxidants, such as, dark chocolate, blueberries, strawberries, artichokes, raspberries, kale, red cabbage, and beans.
- eat carbohydrates with a low glycemic index (GI of 55 or less). A food with a high GI raises the blood glucose more than a food with a low GI. A high GI food is rapidly broken down once it is consumed and sent to cells for energy, stored in the muscles for later use or stored as fat when in excess. Eating low GI food may help reduce the risk of type 2 diabetes, heart disease, hypertension and obesity. Examples of foods with a low GI are most fruits, veggies, beans, minimally processed grains, pasta, low fat dairy food, and nuts.

To learn more about nutrition, weight management, and lifestyle changes please contact Diane Motise, RD at dmotise@heartslifestyle.com

For more information about memory screening, support group, caregiver support, and other resources and information go to alzoc.org.

Next week learn about how our health and medical problems impact our brain health.

You Can Reduce Your Risk of Cognitive Decline: How Our Health and Medical Problems Impact Our Brain Health

Maintaining good health and managing medical conditions are essential in keeping your brain healthy and preventing cognitive decline. Here are some common medical conditions that are important to manage:

- Obesity
- Hypertension
- Diabetes
- High Cholesterol
- Depression

Obesity: Improve Brain Health through Weight Management:

WHO guidance:

- Reduce weight by following a balanced diet
- Reduce sedentary behavior
- Practice regular daily physical activity as appropriate
- Seek professional advice from your healthcare provider

Hypertension, a.k.a High Blood Pressure

Aside from the coronavirus, heart disease is the number one cause of death for both men and women in the United States. Heart disease includes heart attacks, stroke and other cardiovascular diseases (CVD). Stroke is the 5th highest cause of death in the U.S.

- The overall rate of death attributable to CVD is 220.8 deaths per 100,000 based on 2014 data.
- On average, someone dies from CVD every 40 seconds. That is about 2,200 deaths from CVD each day.

Good news! Cardiovascular disease is one of the most preventable diseases!

Studies show that the reduction of hypertension can have substantial benefits in reducing cardiovascular morbidity and mortality and thus improving overall health.

Prevent hypertension through lifestyle factors:

- ***Eat a healthy diet.*** A Mediterranean-like diet is recognized by the World Health Organization as a healthy and sustainable dietary pattern and may reduce the risk of cognitive decline.
- ***Maintain a healthy weight.*** A normal body mass index (BMI) is between 20-25. You can search “BMI Calculator” on line and enter your height and weight to determine your BMI.
- ***Participate in adequate amount of physical activity.*** Less than ¼ of Americans meet the recommendations for physical activity. It is recommended that we get 150 minutes/week of moderate exercise or 75 minutes of intense exercise per week. Always check with your doctor before starting a new exercise program.

Diabetes

The presence of late life diabetes has been linked to an increased risk of dementia. Diabetes is very easy to diagnose with a simple fasting blood sugar test that is usually included in routine lab work. The management of diabetes in the form of medications and lifestyle interventions should be offered to adults with diabetes according to existing WHO guidelines.

High Cholesterol

Current research suggests there is a relationship between high serum cholesterol levels and the onset of Alzheimer’s disease and dementia. High cholesterol is one of the key cardiovascular risk factors that can be controlled. Lifestyle and pharmacological approaches can be undertaken to reduce blood cholesterol.

Depression

There is a substantial body of evidence linking depression to cognitive decline and dementia. Older adults with depression experience a “pseudo-dementia,” which is a temporary decline in memory due to the impact of depression on the brain. Pseudo-dementia is treatable with psychotherapy and/or medication management and should remit with treatment. Also, those with depression are also at greater risk of a true dementia, thus it is important to talk with your doctor and seek an assessment for dementia versus pseudo-dementia.

Mood and Social Support: During the pandemic it has been difficult to maintain relationships with our family and friends. Social engagement is an important predictor of well-being throughout life and can reduce the risk of depression and other health problems, including dementia. Individuals who have meaningful activities, like volunteering, are happier and healthier.

Some suggestions for active social engagement include:

- Join a club
- Volunteer or find a part-time job
- Deliver meals to isolated adults
- Get involved through a church-group
- Make lunch plans
- Meet up with friends
- Join local social programs and other community events through the Council on Aging, Senior Center, church, or other community organizations.

Mental illnesses are real and recovery is possible! Develop your own #Tools2Thrive to find balance between life’s ups and downs and continue to cope with the challenges brought on by the pandemic. For more information, visit www.mhanational.org/may. For free mental health screenings go to MHAscreening.org. Access tools and handouts on mental health skills at screening.mhanational.org/diy.



For more information on Council on Aging call 714-479-0107 or visit coasc.org

To learn more about nutrition, weight management, and lifestyle change please contact Diane Motise, RD at dmotise@heartslifestyle.com

For more information about memory screenings, available support groups, dementia caregiver support, and other resources and information contact the Alzheimer's Orange Count at 949-955-9000 or email at alzoc.org.

Next week learn about how sleep affects your brain health.

Sleep and Its Effect on Brain Health

According to the American Time Use Survey in 2015 adults spent 37% of their life sleeping. Sleep is essential to overall mental and physical health and well-being. Deep sleep (REM sleep) is involved in the process of transforming our experiences into long-term memory.

As we get older our sleep changes:

- Sleep becomes less deep, and there are more awakenings
- Sleep becomes more vulnerable to disturbances (environmental factors, medications, poor lifestyle factors, etc.)
- The good news is that people, at any age, can change their behavior to improve their sleep.

The average adult needs 7-9 hours of sleep **every night**. According to Gallup polls, 40% of Americans get too little sleep. Sleep is important for memory and the immune system. There is an increased risk of dementia seen in individuals who sleep 6 or less hours a night.

Causes of sleep loss:

- Sleep deprivation
 - Obstructive Sleep Apnea
 - Inadequate opportunity for sleep
- Insomnia
 1. Difficulty falling asleep
 2. Frequent awakenings during the night
 3. Waking up earlier than desired

- 4. Perception of non-restorative sleep
- 5. Impairment in daytime function

Insomnia Risk Factors:

- Age (greater prevalence in older individuals)
- Female gender (especially post or peri-menopausal)
- Divorce/separation/widowhood
- Psychiatric illness
- Medical conditions
- Cigarette smoking
- Alcohol and coffee consumption
- Certain prescription drugs

There are certain health risks associated with insomnia.

- Respiratory infections
- Decreased immune response to vaccination
- Onset and persistence of depression
- Suicidal ideation and behaviors
- Heart disease, including hypertension and heart attacks
- Stroke
- Metabolic syndrome and type II diabetes
- Cancer
- Alzheimer's disease

Health risks associated with chronic, insufficient sleep:

- Irritability, depression

- Accidents and injuries
- Problems with memory and attention
- Increased risk of cardiovascular disease, diabetes, obesity
- Increased infections
- Increased all-cause mortality
- Loss of sleep can also affect our body's immune function.

Guidelines for Healthy Sleep Hygiene:

Trouble sleeping and daytime sleepiness can be indications of poor sleep hygiene. Sleep hygiene is defined as a practice of incorporating methods to control all behavioral and environmental factors that may interfere with sleep. Proper sleep hygiene can ensure more restful and effective sleep, which can promote daytime alertness and help treat or avoid certain kinds of sleep disorders.

In the morning: Get up around the same time each day, even on weekends.

During the day:

- Exercise regularly during the day, but avoid exercising in the late evening.
- Try to reduce stress in your life by changing the things that may cause stress
- Caffeine ingestion in the afternoon may delay sleep onset and contribute to light sleep and nighttime awakenings.
- Limit the use of the bed only for sleep and intimacy. Do not eat, read or watch TV in bed.
- Avoid naps late in the afternoon and evening.

- Avoid cigarettes. If you smoke, try to quit smoking entirely. Cutting back on smoking without quitting may lead to nicotine withdrawal in the middle of the night and awaken you.

In the evening:

- Avoid mentally stimulating activities in the few hours preceding bedtime such as reading suspenseful or technical material, paying bills, solving problems, etc.
- Alcohol within 5 hours of sleep will contribute to nighttime awakenings.
- Avoid foods, beverages, and medications that may contain stimulants.
- Avoid heavy meals and/ or a lot of liquid intake close to bedtime.

Before bed:

- Keep a "to do" journal. Write down all the things you worry about. Then write down what you can do tomorrow. Mark the other things "later in the week". This will help clear your mind of worry.
- Go to bed at the same time, even on weekends.
- Try a relaxing bedtime routine.
- Follow the same routine every night and avoid activities that you find frustration or irritating.
- This is a good time to perform relaxing activities such as Yoga or stretching, meditation or prayer. You can listen to relaxing music or have a cup of relaxing herbal tea.

- Avoid computer technology, TV, Tablets and media as they are stimulating as well as giving off light that suppresses natural sleep hormones.
- Consider using white noise, such as a fan blowing or playing the sound of running water.

Keep light levels very low after sunset, keep the bedroom very dark and uncluttered, and the room temperature comfortable and cool. Studies have shown the optimal room temperature for sleeping is 65 degrees.

If you cannot fall asleep:

- Try not to focus on falling asleep if you are having trouble. Turn the clock around so you do not focus on the time.
- If unable to go to sleep in about 20 minutes, get out of bed and find a quiet place to do a quiet activity, such as meditate, listen to music, or do relaxation exercises until sleepy.

If you have medication to help you sleep:

- Only take the medicine if you are unable to fall asleep, or if you wake up within a couple hours of falling asleep.
- Some sleep medication may make you drowsy and tired the next day. Notify your doctor or pharmacist if this happens and do not perform any activities that require alertness.

Source: <https://www.nia.nih.gov/health/good-nights-sleep>

Obstructive Sleep Apnea (OSA) is a condition in which breathing stops involuntarily for brief periods of time during **sleep**. Periods when breathing stops are called **apnea** or apneic episodes.

In adults, the most common **cause** of **obstructive sleep apnea** is excess weight and obesity, which affects the soft tissue of the mouth and throat. During **sleep**, when throat and tongue muscles are more relaxed, this soft tissue can **cause** the airway to become blocked.

Common symptoms of OSA:

- Daytime sleepiness
- Loud snoring
- Witnessed apneas

- May also have:
Insomnia
Morning headaches
Nighttime urination
Reflux
Depression
Cognitive complaints

Or no symptoms at all!

Diagnosis and treatment of sleep apnea requires sleep laboratory testing and a polysomnography. The treatment of OSA includes continuous positive airway pressure (CPAP). In some cases where the OSA is mild oral appliances may be used. If you have concerns ask your doctor for a referral to a sleep specialist.

Risk of Alzheimer's Disease with OSA:

- 75% of Alzheimer's patients in nursing home and residential care facilities have sleep apnea, according to Dr. Ruth Benca, professor of psychiatry and human behavior at UCI.
- There is an overall risk to developing Alzheimer's Disease, and cognitive impairment with OSA.
- Greater cognitive and functional impairment

The good news is that people, at any age, can change their behavior to improve their sleep.

For more information on sleep visit

<https://www.nia.nih.gov/health/good-nights-sleep>

Next week, learn about other behaviors that impact brain health.

What Other Behavior's Affect Brain Health?

So far we've covered healthy sleep, exercise, good nutrition, regular health check ups and supporting positive mental health.

There are other behaviors that can affect our brain health:

- Tobacco use
- Alcohol use
- Sleep Apnea
- Stress
- Hearing loss

Tobacco use

- Studies show an association between tobacco smoking and dementia, or cognitive decline, later in life.

Benefits of Quitting:

- Apart from helping cognition, quitting can decrease your risk for many types of cancers, cardiovascular diseases and respiratory disorders
- Reduced depression, anxiety, stress and improved mood and quality of life

Alcohol use:

- There is extensive evidence on excessive alcohol intake as a risk factor for dementia and cognitive decline.
- If you are engaging in hazardous and harmful drinking it is important to talk about it with your family or your physician. Behavior and psychological interventions are available as treatments.

Chronic Stress:

- Everyone experiences stress. In fact, a certain amount of stress is good for us because it motivates us to take action.
- Chronic stress affects memory, mood, anxiety, and promotes inflammation, which adversely affects brain and heart health.
- If you believe you are experiencing stress, talk to your doctor or pastor.
- Stress management treatments and techniques are available.

Go to screening.mhanational.org/diy for more information.

Healthy ways to relax and recharge:

- Go for a walk
- Spend time in nature
- Call a good friend
- Release tension with a good workout
- Write in your journal
- Take a long bath
- Light scented candles
- Savor a warm cup of coffee or tea
- Play with a pet
- Work in your garden
- Get a massage
- Curl up with a good book
- Listen to music
- Watch a comedy

Hearing Loss:

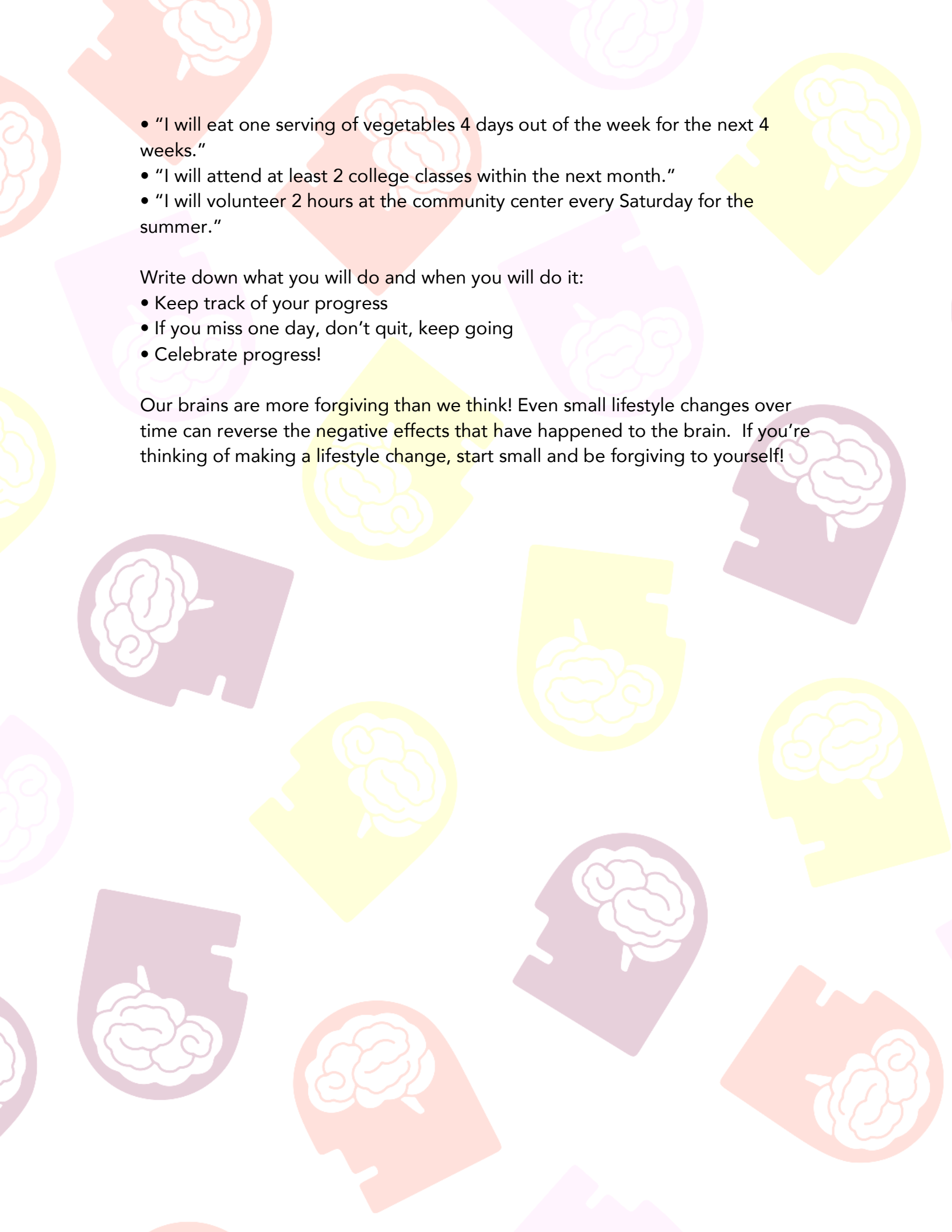
- 1 in 3 adults aged 65 and older are affected by hearing loss
- Hearing impairment has debilitating consequences on our ability to function and on social and emotional well-being.
- Hearing loss is associated with increased risk of cognitive decline or dementia. When you treat your hearing loss, you decrease the associated risk of dementia.
- Hearing loss interventions, such as hearing aids, have the potential to substantially improve social interactions for older people and improve daily functioning.
- Talk to your doctor about hearing screenings.

Engaging in a healthy lifestyle requires preparation and goal setting:

- Pick one thing you can do in each area that may help improve your brain health, such as diet, exercise, meditation, smoking or alcohol cessation.
- Think of small, first steps you can take. Goals should be:
 1. Specific
 2. Measurable
 3. Attainable
 4. Realistic
 5. Time-bound

Examples:

- "I will walk for 15 minutes, 3 times per week for the next 2 weeks."

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- "I will eat one serving of vegetables 4 days out of the week for the next 4 weeks."
 - "I will attend at least 2 college classes within the next month."
 - "I will volunteer 2 hours at the community center every Saturday for the summer."

Write down what you will do and when you will do it:

- Keep track of your progress
- If you miss one day, don't quit, keep going
- Celebrate progress!

Our brains are more forgiving than we think! Even small lifestyle changes over time can reverse the negative effects that have happened to the brain. If you're thinking of making a lifestyle change, start small and be forgiving to yourself!