

Brain Health Maintenance:

Stay active: According to the latest research (<http://www.thealzheimersjourney.com/at-last-a-hint-at-prevention/>; <http://thelancet.com/commissions/dementia2017>), you are advised to stay active *physically, cognitively, and socially*, every day with familiar and enjoyable activities that can be incorporated into a schedule or routine. These should be at the level of challenge and success, perhaps requiring minimal assistance, not at the level of frustration and discouragement. You will probably have to push yourself some or others may have to push you to do these things and a little pushing is good because once you get going you will probably enjoy the activities. But if it becomes a constant struggle then you probably haven't picked the right activities for you. Easy activities are also appropriate, but not to the point of boredom. There should be a priority on exercising and maintaining valued skills and knowledge. Outside cuing and reminders to maintain these activities are appropriate. Many kinds of activity are helpful, and it is important to choose things that you will enjoy doing and that you are likely to keep doing. It is often best to choose things that you would be doing anyway, or modify what you do, such as walking to close places instead of driving, or taking the stairs instead of the elevator.

Stay active physically: If you are going to start an exercise program that is substantially different or more vigorous than your usual activity you should ask your doctor about it first. Aerobic and strengthening exercises each contribute separately to your physical and mental health. The latest research indicates that the sessions should be at least an hour long twice a week as a minimum goal. You approach maximum benefit at about one hour daily, although I don't want to discourage you from doing more than that. This may be aerobic, strengthening, or mind-body exercises. Exercise that is aerobic is exercise that moderately increases your heart rate and breathing, such as walking, swimming, bicycling and climbing stairs. Strengthening exercises focus on improving strength in specific muscle groups, such as push-ups, sit-ups, lifting weights, and certain exercise machines. Mind-body exercises include yoga, similar disciplines, and sports. Exercise is the single change that produces the most cognitive improvement. The improvement is in attention, speed of doing things, making decisions, and solving problems, but not in memory.

Stay active cognitively: Maintaining valued skills and knowledge requires staying active at the hobbies, pastimes, games, interests, and even languages that have been important during your life. You probably can't do everything you used to do, or do it as fast or as well, but it is still worthwhile to find the parts you can do. If you have ever wanted to write or record your life story or important stories, experiences or ideas from your life, now is the time to do it. You might work with someone else on it, such as family members or good friends who went through those times with you. It is also a good time to go over old photo albums, diaries, keepsakes, and memorabilia. Taking on new activities such as learning a language or taking classes or a new hobby or skill or traveling to new places are best for people who are not having memory challenges; otherwise it can be too frustrating.

People often ask about brain exercises. Reading, games, and puzzles can be helpful. TV usually isn't very helpful unless it generates discussion. There are a lot of computer games and brain exercises available and most are modestly helpful, but they are not as helpful as their advertising suggests. These games are not necessarily better than other cognitive activities that you might enjoy more or that might serve more purpose for you. Playing the games makes you better at the games, but not necessarily at other cognitive activities. The exercises at www.BrainHQ.com seem to be among the best. Also, AARP has some interactive games <https://games.aarp.org/category/staying-sharp>

If you are so inclined, you might include reading about brain health among your cognitive activities, such as materials from the Global Council on Brain Health (<https://blog.aarp.org/2018/01/23/the-best-advice-for-keeping-your-brain-healthy/>) or John Medina's *Brain Rules for Aging Well* (<http://brainrules.net/brain-rules-for-aging-well>). Recommended books are *The Memory Bible* (Gary Small) and *High-Octane Brain* (Michelle Braun). Other titles include: *The Alzheimer's Prevention Program*; *Keep Your Wits About You: The Science of Brain Maintenance as You Age*; *The Memory Manual: 10 Simple Things You Can Do to Improve Your Memory After 50*; *Improving Your Memory: How to Remember What You're Starting to Forget*; *Total Memory Workout: 8 Easy Steps to Total Memory Workout*; *Your Memory: How It Works and How to Improve It* (2nd edition); *The Harvard Medical School Guide to Achieving Optimal Memory*; *The Brain Health Book: Using the Power of Neuroscience to Improve Your Life*.

Stay active socially: Staying in touch with people is very important to your cognitive and emotional health. A good goal is to have real contact every day with at least one person you don't live with. It is important to have a few people you are really close with and to cherish and maintain those relationships. But it's also important to have a social network of other family and friends. And our lives are richer if we are also able to relate to people we don't know well, in groups or organizations, religious organizations, classes, public places, and public events (concerts, sports events, movies, meetings, plays). Contact by electronic media (phone, video calls, email, Facebook) can be an important part of socializing, but it is best to be only a part.

Meaning of Life: Changes with age also bring about changes in life perspective. I encourage you to reflect upon the purpose in life, taking into account changes with age, family circumstances, health, and abilities (<https://www.rush.edu/news/press-releases/purpose-life-may-help-aging-brain>). Such reflections may take place alone, through writing or other means of expression, in talking with family and/or close friends, in a religious or spiritual context, and/or with a counselor or psychotherapist.

Diet: There are many theories and varied advice regarding diet and cognitive abilities. I recommend first and foremost that you followed your doctors' dietary advice regarding your particular medical conditions. Beyond that, I recommend the MIND diet, (the Mediterranean-DASH Diet Intervention for Neurodegenerative Delay). As the name suggests, the MIND diet is a hybrid of the Mediterranean and DASH (Dietary Approaches to Stop Hypertension) (<https://www.rush.edu/news/press-releases/new-mind-diet-may-significantly-protect-against-alzheimers-disease>). This is a prudent, sustainable, and comprehensive approach that integrates the most reliable recent research. (<http://www.webmd.com/alzheimers/features/mind-diet-alzheimers-disease>).

Sleep: Finally, good sleep is important. If you are not sleeping well, check your sleep hygiene (<http://www.cci.health.wa.gov.au/docs/Info-sleep%20hygiene.pdf>), such as avoiding caffeine, nicotine, and alcohol before bedtime; having a regular bedtime and sleep rituals; have a dark, quiet place to sleep (eye shade and earplugs, if needed); a somewhat cool room with adequate blankets; and exercise earlier in the day. Check with your doctor if this doesn't work, or if you have medical conditions that interfere with your sleep (such as pain, sleep apnea, bladder problems, digestive problems, nightmares).