



Illinois Extension

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN



Keys to Embracing Aging Brain Activity

The brain allows you to interact with the world, understand, analyze, and respond to various surroundings. Therefore, a healthy brain is crucial to survival, growth, and everyday successes. Similar to the rest of the body, the brain needs exercise and maintenance in order to optimize and protect its current and future health. In particular, the brain needs socialization, mental stimulation, physical activity, nutrition, and sleep.

How to Stay Mentally Fit

Socialize

Socializing with others provides opportunities for communication, critical thought, creativity, and emotional expression. It can also play a role in boosting personal meaning and identity. People who isolate or segregate themselves are at greater risk of developing depression and dementia. Socializing can be easy:

- **Keep in touch with friends and family.** Friends and family can be a simple avenue to maintain a social environment. Busy schedules and various life transitions, however, can challenge such connections and require planning and scheduling.
- **Stay engaged or involved.** Connecting to your community can help the brain thrive. Joining a club, volunteering, or becoming active in a church are just a few ways in which stronger social networks can be developed.
- **Know your neighbors.** From someone living next door, to a local shopkeeper, neighbors are right outside your door. They can help you create meaningful connections close to home.

• **Plug into the Internet.** The Internet has the potential to introduce you to a network of new people and reconnect you with old friends or acquaintances. Online communities, dating services, chat rooms, and social media accounts such as Facebook are just a few examples of ways to stay connected via the Internet.

There are many ways to be socially active!

- Join a group or club that interests you.
- Organize a game night or card-playing with family or friends.
- Volunteer for your favorite charity or nonprofit organization.
- Exercise with a partner or sign up for a class.
- Try a computer class at your local library to learn new, exciting things.
- Scan the paper and notice boards for announcements about community events

Mental Stimulation

Just as going to the gym is important for your physical health, exercising your brain through mental stimulation is equally important throughout the lifespan. Through mental exercise, you can stimulate and enhance brain cell connections and potentially delay the onset of Alzheimer’s disease. Some common forms of mental stimulation include:

- **Games and puzzles:** Games and puzzles that challenge you to think and test your skill and intelligence provide more than entertainment — when practiced over time, they target areas of the brain linked to memory, concentration, language skills, visual-spatial abilities, and logic and organization.
- **Reading and writing:** Reading and writing engage the hippocampus — the memory component of the brain. To further challenge yourself, try reading a word backwards or write with your non-dominant hand.

Try This: Sudoku

1	3		6	9			8	7
		6	3			1	2	
	8	2		1	7			9
2					5	6		8
8			7	4				
6	4	1	8		9	7	5	3
3	2			6		5		
9		4	2		3		7	
		8		7	1	2	3	4

The object of Sudoku is to fill the empty cells, one number in each, so that each row, column, and 3-by-3 box contain the numbers 1 to 9 exactly once. The answer key can be found at the end of this fact sheet.

- **Education and lifelong learning:** Education is linked to health and healthy behaviors. The more educated you are, the healthier you are likely to be. Pursuing new knowledge throughout life and beyond formal settings enhances social activity, active citizenship, and personal development.

- **Hobbies:** Hobbies can challenge the brain, especially ones that require hand-eye coordination and mental calculation, such as knitting, wood crafts, painting, sculpting, and playing an instrument. Hobbies also create rich environments and provide a sense of purpose.

- **Emotional/psychological/spiritual engagement:** Spirituality encompasses more than religious values and beliefs. It involves an escape from the hurried and material world. Spiritual practices can involve prayer, yoga, walking, meditation, quiet contemplation, and other relaxation techniques that help you slow down and connect with the essence of who you are and what you value in life. Such practices can also help reduce stress, which has a negative impact on brain health.

- **Exposure to new environments:** Whether you take a trip or drive a different route to work, new environments are good for the brain. New environments are enriching because they can be exciting, and they challenge the brain to process new information.

Physical Activity

Engaging in physical activity is one of the biggest boosts you can give your brain, especially exercise that gets your heart pumping. When the heart beats, it pumps blood rich with oxygen and nutrients to the brain. Thus, the more fit your heart, the more effectively your brain can be fed what it needs to stay sharp. There are many ways throughout the day to increase physical activity — try walking 10,000 steps a day, play with your children or grandchildren outside, take the stairs, ride a bike, go dancing, or move around during television commercial breaks. It is also important to strength train. Physical activity is associated with better decision-making, focus, and conflict resolution skills. Exercise can also trigger other health benefits such as a decreased risk of obesity, heart disease, stroke, and diabetes as well as improved mood, improved sleep, an increase in energy, and reduced anxiety and stress.

Nutrition

Nutrition plays a large role in brain development and function throughout life. A brain-healthy diet can help reduce the risk of chronic age-related brain diseases, including Alzheimer's disease (Alzheimer's Association, 2011). A brain-healthy diet is one that protects your heart, encourages good blood flow to the brain, and fights against diabetes (Alzheimer's Association, 2011). For a healthy brain diet:

- **Seek foods high in antioxidants.** Antioxidants are dietary substances that include various nutrients that prevent, slow, and even repair natural cell damage, including mental decline. An eating plan containing plenty of fruits, vegetables, whole grains, and nuts can supply all the antioxidants your body needs. Some potent antioxidant foods to consider: blueberries and other berries, red delicious apples, sweet cherries, black plums, cranberries, oranges, red grapes, strawberries, avocados, raw garlic, cooked cabbage and broccoli, spinach, kale, red bell peppers, carrots, sweet potatoes, onions, tomatoes, whole wheat, oatmeal, brown rice, pecans, walnuts, and hazelnuts.
- **Power up with omega 3.** Omega-3s are fatty acids the body needs to properly function but does not make on its own. The best way to get omega-3 is through food sources. Examples of food high in omega 3: salmon, tuna, mackerel, trout, sardines, walnuts, pecans, almonds, leafy green vegetables, flax, pumpkin seeds, sesame seeds, and eggs.
- **Cut calories.** Being overweight and obese leads to increased risk of brain function decline in later life. Overweight people often have high cholesterol and high blood pressure, which also increases the risk of developing dementia in later life.
- **Fight sodium and cholesterol.** Go easy on eating meats and other animal products high in fat, be stingy with salt, and limit preserved and pre-processed foods.

Catch your Zzzzzzs

Sleeping well is essential to good health and brain functioning. For better sleep:

- Exercise, but not within a few hours of bedtime.
- Eat a well-balanced diet.
- Set regular bedtime and waking hours.
- Get up and do something until you are tired and ready to sleep if you cannot fall asleep within the first 20 minutes of getting into bed.
- Avoid reading or watching television while in bed.
- Keep a sleep journal to keep track of the activities, diet, and other things that might affect how you're sleeping.
- Consult a health provider if you're consistently having trouble sleeping.

Neurobics

Neurobics involves exercising parts of the brain that are not used on a regular basis. Challenging your physical and emotional senses enhances brain activity and health.

For example, think about your night-time routine. Much of what you do is out of habit. You likely don't even have to think about brushing your teeth, thus the brain is not being challenged. But simple changes in your routine, such as brushing your teeth with your opposite hand, can stimulate and challenge your brain to work harder.

Examples of neurobic exercises include:

- Taking a new driving or walking route to work.
- Brushing your teeth, vacuuming the house, or washing the dishes with the opposite hand.
- Going to new places (such as an ethnic food market) to experience new sights and smells.
- Finding change in your wallet using your sense of touch rather than sight.

Stimulating the brain through diet

Brain Healthy Foods to Try

Foods to Limit or Avoid

Dark-skinned vegetables (kale, spinach, Brussel sprouts, alfalfa sprouts, broccoli, beets, red bell pepper, onion, corn, eggplant)	Fried, greasy, high-fat foods
Cold water fish (halibut, mackerel, salmon, trout, tuna)	Excess sugary products and high fructose corn syrup (soda, energy drinks, candy, and desserts)
Nuts (almonds, pecans, walnuts)	Salty foods (chips, processed meats)
Dark-skinned fruits (prunes, raisins, blueberries, blackberries, strawberries, raspberries, plums, oranges, red grapes, cherries)	Fast foods and processed foods (drive-thru meals, chips, packaged meals)
Drink lots of water	Alcohol and caffeine
Whole grains (whole-wheat breads and pasta, brown rice) Olive Oil	Refined grains (white flour, white bread, white rice) Other oils and solid fats (vegetable oil, lard, shortening)

Conclusion

Lifestyle is a major factor in determining brain health. Through regular socialization, mental stimulation, physical activity, nutrition, and sleep, you can help keep your brain active and healthy. Maintaining a healthy brain and establishing other healthy lifestyle behaviors throughout your life will influence optimal aging.

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Sudoku

Key

1	3	5	6	9	2	4	8	7
7	9	6	3	8	4	1	2	5
4	8	2	5	1	7	3	6	9
2	7	9	1	3	5	6	4	8
8	5	3	7	4	6	9	1	2
6	4	1	8	2	9	7	5	3
3	2	7	4	6	8	5	9	1
9	1	4	2	5	3	8	7	6
5	6	8	9	7	1	2	3	4

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