



KEYS TO EMBRACING AGING

Brain Activity

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The brain allows you to interact with the world and understand, analyze and respond to various surroundings. Therefore, a healthy brain is crucial to survival, growth and everyday successes (Smith, 2010). 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 (AARP/Dana Alliance for Brain Initiatives, 2009; Alzheimer's Association, 2011).

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 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 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 play card games 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 and 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 even delay the onset of Alzheimer's disease (Mitchell, 2010; AARP/Dana Alliance for Brain Initiatives, 2009).

Some common forms of mental stimulation include:

- **Games and puzzles:** Games and puzzles that challenge you to think and test your skill and intelligence not only provide 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 nondominant hand.
- **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, woodcrafts, 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.

**Try This:
Sudoku**

The object of Sudoku is to fill the empty cells, one number in each, so that each row, column and 3 by 3 box contains the numbers 1-9 exactly once. The answer key can be found on the last page.

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

Neurobics™

Neurobics (Katz and Rubin, 1998) 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 nighttime 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/walking route to work
- Brushing your teeth, vacuuming the house or washing the dishes with the nondominant hand
- Taking a shower with your eyes closed (be careful!)
- 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

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, playing with your children or grandchildren outside, taking the stairs, riding a bike, going dancing or moving 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, diabetes, 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 are 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-3 are fatty acids that 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 foods high in omega-3 include 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 increase the risks of developing dementia in later life (Alzheimer’s Association, 2011).
- **Fight sodium and cholesterol.** Go easy on eating meats and other animal products high in fat, be stingy with salt and limit preserved and preprocessed foods.

Stimulating the Brain Through Diet

Brain Healthy Foods to Try	Foods to Limit or Avoid
Dark-skinned vegetables (kale, spinach, Brussels 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)	Refined grains (white flour, white bread, white rice)
Olive oil	Other oils and solid fats (vegetable oil, lard, shortening)

Catch Your Zzzzzzs

Sleeping well is essential to good health and brain functioning (AARP/Dana Alliance for Brain Initiatives, 2009). 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 care provider if you're consistently having trouble sleeping

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 Puzzle Answer 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