

Newsflash

Issue 2018.12

Brain-Training Strategies Could Help You Stay Independent as You Age



Wise Choices Healthy Holiday Eating

- Enjoy a healthy breakfast to help prevent overeating later on.
- Eat what's best for you first. Fill at least half your plate with fresh fruit and veggies. You'll have less room for the rest.
- Bring a healthy dish to the party.
- Fruit by itself makes an excellent dessert. Try placing a bowl of clementines or apples on the holiday table.
- Avoid beverages high in calories and sugar.
- Keep a food journal to track what you're eating.
- Instead of focusing on food, spend time with family, friends, and activities.
- Stay positive. If you eat more on some days, eat less on others. If you miss a workout, exercise a little longer the next day.



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Surveys suggest that about 90 percent of older adults want to live independently for as long as possible, and certain research points to cognitive training methods that may help you achieve that. Samuel Gandy, MD, associate director of Mount Sinai's Alzheimer's Disease Research Center, notes that the study is among the first to show that cognitive training actually translates to improvements in daily functioning. These improvements may help seniors maintain their independence, since delaying the onset of cognitive impairment by as little as five or six years would greatly reduce the number of people affected with dementia. However, he adds that a replication study is required to confirm the results.

The study looked at how three brain training programs (focusing on processing speed, memory and reasoning ability) affected 2,832 cognitively normal participants as they aged. They were divided into a control group and three intervention groups focusing on different mental skills:

Memory. Remembering word lists, sequences of items, and main ideas/details in stories.

Reasoning. The ability to solve problems that follow patterns, a skill that aids in activities such as reading bus schedules or filling out order forms.

Speed of processing. The ability to identify and locate visual information quickly, which is useful for looking up phone numbers, and reacting to changes in traffic when driving.

Significant Improvements

Training consisted of 10 60- to 75-minute sessions over five to six weeks. Ten years later, participants in each intervention group reported having less difficulty with instrumental activities of daily living, such as taking medications, cooking, and managing their finances. About 60 percent of trained participants compared with 50 percent of controls were at or above their starting level of function regarding these daily tasks. Memory performance improved for up to five years following the intervention, but there was no longer a significant difference between trained participants and controls at 10 years. However, participants in the reasoning and speed-of-processing groups still showed significant improvements relative to controls in the trained skills even at 10 years. "Booster" training at 11 and at 35 months after the initial sessions produced additional improvements.

Simple methods to try

One of the training programs used in the study (speed of processing training), is now commercially available from Posit Science (www.positscience.com), and an online version of the memory-training program is currently in development. But Dr. Gandy says you don't necessarily have to use the programs in order to benefit from these study findings.

Memorize the items on your grocery list before you go to the store, then avoid referring to the list unless absolutely necessary. A good tip for success with this is to divide your list into logical groups – for example, apples, cucumbers, paper, ink, cabbage, bananas, grapes, beans, stapler, oranges, can be better learned by rearranging them into a list of four fruits, three vegetables, and three stationery items.

Another thing you can do is to place eight to ten assorted items on a tray, then cover them with a cloth and try to recall what they were. Also practice mentally solving mathematical problems without using a calculator, or read a newspaper or magazine article and then summarize the main points for your spouse or a friend. Anything you can do to challenge yourself mentally may help give your brain a boost.

What You Can't See May Hurt You

The 37-year-old systems analyst who came to see me had been experiencing daily headaches for several months – ever since he'd taken on a higher-pressure job that involved a nearly 4-hour daily commute...in a 20-year-old jalopy.

He had already been put through a workup that included MRIs, CT scans, and numerous laboratory tests. He was referred to a neurologist and told he had tension headaches...and over-the-counter pain medications, and prescribed muscle relaxants and tranquilizers, had not helped.

I assigned him to the medical student working with me, and her detailed medical history disclosed that his headaches occurred only while driving to and from work.

Armed with that clue, I asked him to leave work early the next day and stop by the office. He arrived with a splitting headache. A blood test showed that he had an elevated level of carboxyhemoglobin, indicative of carbon monoxide (CO) poisoning. He junked that car so fast we never had time to define the source of the probable exhaust leak that could have cost him his life. His headaches disappeared as quickly.

HOW THIS GAS DOES HARM

CO, one of the most deadly gases known, is colorless, odorless, and tasteless – undetectable by any of our natural senses. It binds to hemoglobin (the oxygen-carrying protein in blood) with a tenacity that is 240 times as strong as the oxygen whose place it usurps. It also interferes with unloading whatever oxygen remains attached to the hemoglobin molecule. As a result, the body is robbed of oxygen. The ultimate result – death due to lack of oxygen – is contingent on the duration of exposure as well as the concentration of CO in the inspired air.

Nonfire-related CO poisoning is responsible for almost 50,000 ER visits and 1,200 deaths annually. Smoke from fires is the most common source of CO. Other sources include gas stoves, hot-water heaters, furnaces, snow blowers, or any malfunctioning or poorly ventilated fuel-burning system.

SYMPTOMS CAN BE CONFUSING

The earliest symptoms of CO poisoning – headaches, dizziness, nausea, vomiting, and lethargy – resemble those of a variety of conditions. This can easily lead victims and professionals to attribute them to a virus or food poisoning.

More recently recognized is a delayed neuropsychiatric syndrome (DNS), characterized by a decline in cognition, muscle weakness, and gait abnormalities, that occurs anytime up to eight months following a seemingly full recovery. DNS can affect up to 40% of those exposed to CO and, curiously, has been observed to bear little or no relationship to the actual levels of carboxyhemoglobin in the blood. Because it has now been almost two decades since my patient's harrowing experience, he seems to have escaped this devastating complication.

PROTECT YOURSELF

The best means of detecting an impending disaster is a CO detector. Every house or apartment should have at least one of the small, battery-run, relatively inexpensive alarms, and ideally, such a device should be in each room with a potential source of CO fumes. Batteries should be replaced once a year.

If an alarm goes off, don't waste time attempting to find the source. Open the windows, leave the home, and call 911. Most victims of acute poisoning can be handled in the nearest emergency room with oxygen given by mask. Those who are unconscious or have very high levels of carboxyhemoglobin may benefit from oxygen administered under high environmental pressure (hyperbaric oxygen).

And, of course, keep your car's inspection sticker up to date.

It's Never Too Late to Get Healthy

It's not just how you live in your younger years that affects your quality of life and how long you'll live. According to a study published online by the British Medical Journal, healthy habits after age 75 – especially being physically active, having a rich social network, and not smoking – can extend survival by five years for women and six years for men.

Swedish researchers collected information about the lifestyles, leisure activities, and social networks of 1,810 adults ages 75 and older, then followed them for up to 18 years. Lifestyle measures included smoking, alcohol consumption, and body weight. Leisure activities included exercise as well as mental activities, social pursuits, and things like volunteering. Social networks were measured by marital status, living arrangements, and the quantity and quality of contact with children, friends, and relatives.

The median survival of people who the researchers classified as having a low-risk profile (nonsmokers, those who drank a moderate amount of alcohol, those who participated in at least one leisure activity, and those who had at least a moderate social network) was a 5.4 years longer than that of people with a high-risk profile (unhealthy behaviors, no leisure activities, and a limited or poor social network). Of the leisure pursuits, physical activity – gymnastics, swimming, or walking regularly – had the strongest association with survival, increasing the median age of death by more than two years. Those who drank alcohol survived a median age of death by more than two years. Those who drank alcohol survived a median of 1.3 years longer than people who never drank. And half of the participants with a rich social network lived at least 1.6 years longer than those with a limited or poor one.

Bottom line. The study which focused solely on those 75 and older, suggests it's never too late to adopt healthier habits.

