New Thinking On Memory
Misplaced your keys—again? Can't remember the name of someone you met just 5 minutes ago? Science is on the case! These breakthrough tips will fight forgetfulness and boost your brainpower.

By Nancy Kalish, Prevention

These days I spend a lot of time in front of my closet. It's not that I'm particularly choosy about what to wear. It's because I can't remember why I opened the closet in the first place. Somehow, between my living room and bedroom, all memory of what I was after went poof, leaving me staring blankly at those shelves.

It seems like ever since I hit my mid-40s, my memory has been in a state of rebellion. I certainly remember all the big things: my name, what year it is, the fact that my teenage daughter believes I'm invading her privacy when I ask her what happened at school today. But it's the little things what I ate last week at that new restaurant or even if I liked that new restaurant (speaking of which, what was its name?) that sometimes slip away. Experts say that such "senior moments" are normal even if it will be decades before you can begin to think about tapping your 401(k). Reassuring, yes, but that still doesn't help me remember the name of that restaurant.

Brain researchers are on the case. Studies are uncovering how our mundane, everyday habits what we eat, the pills we take, how we rest, and even our confidence levels have a big impact on our brain. Here's what experts say are the newest strategies guaranteed to keep your memory quick, agile, and sharp.

Check Your Iron

Iron helps the neurotransmitters essential to memory function properly and your brain can be sensitive to low amounts. "A poor diet or heavy menstrual periods, such as those during perimenopause, can cause your iron levels to drop enough to affect your recall abilities, even if you don't have anemia," says Laura Murray-Kolb, PhD, an assistant professor of international health at Johns Hopkins University.

When she gave memory tests to 149 women, those with low iron levels missed twice as many questions as those with sufficient amounts. Yet after 4 months of taking iron supplements, most of the women, with their iron levels back to normal, scored as well as the best group in the first test. Murray-Kolb recommends that women who don't get enough through their diets consider taking a daily multivitamin with 18 mg of iron (8 mg for postmenopausal women).

If you still suspect you're low, ask your doctor for a blood test to check your ferritin level, which will reveal even a moderate iron deficiency; a regular blood test isn't sensitive enough to pick up levels lower than the threshold for anemia.

Turn Off Background Noise

We all multitask, a necessary survival skill of the digital age. But did you know that just listening to the news while you answer your e-mail can limit how well you're able to recall both? Normally, when you take in new information, you process it with a part of the brain called the cerebral cortex. "But multitasking greatly reduces learning because people can't attend to the relevant information," says UCLA psychology professor and memory researcher Russell Poldrack, PhD. That's because the brain is forced to switch processing to an area called the striatum, and the information stored here tends to contain fewer important details.

Luckily, this kind of memory problem has an easy fix, says Poldrack: Simply pay undivided attention to whatever you really want to recall later.

Refresh Your Mind

Yes, you know that meditation can reduce stress, which research shows can damage brain cells and your ability to retain information over time. But the ancient practice can do more than just soothe your soul: It may also sharpen your memory.

According to a University of Kentucky study, subjects who took a late-afternoon test after meditating for 40 minutes had significantly better scores than those who napped for the same period. Even more surprising, when the subjects were retested after being deprived of a full night's sleep, those who meditated still scored better than their study counterparts. How could that be? Meditation, like sleep, reduces sensory input, and this quiet state may provide a time for neurons to process and solidify new information and memories.

Brain scans have revealed that meditation produces a state somewhat similar to non-REM sleep (which many specialists believe is the more mentally restorative sleep phase), in that many neurons of the cortex fire in sync, says Bruce O'Hara, PhD, a coauthor of the study. "However, unlike when you sleep, consciousness is fully maintained in meditation, so there is no grogginess upon 'awakening.'"
For regular, highly experienced meditators, the benefits to memory can be substantial. A 2004 University of Wisconsin-Madison study discovered that the brains of long-term Buddhist practitioners who have meditated every day for many years generated the highest levels of gamma waves—a pattern of brain activity that's associated with attention, working memory, and learning ever reported in other studies.

Good sources to help you get started:

* A Woman's Book of Meditation: Discovering the Power of a Peaceful Mind* by Hari Kaur Khals

*Meditation for Beginners DVD*, gaiam.com

**Control Your Cholesterol**

A healthful cholesterol level is as essential for mental sharpness as it is for cardiovascular efficiency. When plaque, caused by "bad" LDL cholesterol, builds up in blood vessels, it can hinder circulation to the brain, depriving it of essential nutrients. One possible consequence: memory problems.

"It doesn't take much plaque to block the tiny blood vessels in the brain," explains Aaron P. Nelson, PhD, chief of psychology and neuropsychology at Brigham and Women's Hospital in Boston. "In addition, several studies have shown that high cholesterol is a risk factor for Alzheimer's disease." While that connection is not fully understood, the take-home is clear: Get your cholesterol checked regularly; if it's high, work with your doctor to lower it.

**Double-Check Your Meds**

One side effect of taking many prescription and over-the-counter drugs can be a worrisome increase in memory lapses. Antidepressants, antianxiety drugs, antispasmodics, beta-blockers, chemotherapy, Parkinson's medications, sleeping pills, ulcer medications, painkillers, antihistamines, and even statins can all affect your memory, says Gary Small, MD, chief of the UCLA Memory and Aging Research Center and author of The Longevity Bible: 8 Essential Strategies for Keeping Your Mind Sharp and Your Body Young.

As you get older, drugs tend to stay in your system for a longer period of time, increasing the likelihood of troublesome interactions. Fortunately, any drug-related impairment will likely improve as soon as the drug is discontinued. "Speaking with your doctor about adjusting your dose or switching medications is often a simple solution," says Small.

**Munch an Apple**

A couple of apples a day may keep the neurologist away. "Apples have just the right dose of antioxidants to raise levels of acetylcholine, a neurotransmitter that's essential to memory and tends to decline with age," says Tom Shea, PhD, director of the University of Massachusetts Lowell Center for Cellular Neurobiology and Neurodegeneration Research. In addition, antioxidants in apples help preserve memory by protecting brain cells against damage from free radicals created by everyday metabolic action, such as the processing of glucose by the body's cells.

A study Shea coauthored with Amy Chan, PhD, published last year in the Journal of Alzheimer's Disease, found that mice suffering from the equivalent of normal human age-related memory loss or early Alzheimer's disease got a memory boost when they consumed a daily dose of apple juice. After just 1 month, those mice did a far superior job on a maze, which tests short-term memory, than the animals that didn't get the drink. Shea has begun clinical trials to determine whether humans get a similar benefit. In the meantime, he recommends consuming two or three apples or two 8-ounce glasses of apple juice each day; even one will give your brain a good lift.

**Rev Up Your Heart**

Old-fashioned cardio can also keep your memory spry by improving a number of aspects of brain functions. Last year, researchers from the University of Illinois, Urbana, put two groups of older, healthy adult volunteers on different regimens. One group did aerobic training three times a week for 1 hour; the other did non-aerobic stretching and toning.

MRIs taken after 3 months showed that the aerobics group actually increased their brains' volume (which could reflect new neurons or cells) and white matter (connections between neurons) in the frontal lobes, which contribute to attention and memory processing. The aerobic exercisers, who ranged from age 60 to 79, had the brain volumes of people 2 to 3 years younger, said Arthur Kramer, PhD, who reported his results in the Journal of Gerontology: Medical Sciences. Taking a 1-hour walk at a brisk, slightly breathless pace three times a week will likely confer the same benefits.
**Believe In Your Brain**

Do you find yourself worrying about forgetfulness? Give it up! Any anxiety you feel about your occasionally wayward memory later in life may actually make it worse. In a recent North Carolina State University study published in Psychology and Aging, healthy older folks scored poorly on memory tests after being informed that aging causes forgetfulness.

When another group was told that there wasn't much of a decline in their recall abilities with age, however, they scored 15% higher even better than a control group told nothing about memory and age. "Believing in negative stereotypes can be a self-fulfilling prophecy," says head researcher and psychology professor Thomas M. Hess, PhD. "That's a shame because your memory probably isn't nearly as bad as you fear it is."

**High-Tech Brain Power**

Your teen knows best: Video games are good for your brain

What's an eight-letter word for brain booster? The answer could be Nintendo. Experts say playing one of the new games specially designed to improve your focus could have the indirect effect of getting your memory in shape.

"Whenever you solve puzzles or do brainteasers, you're making the connections between your neurons work more efficiently, which is like putting money in the bank," says Stuart Zola, PhD, an Alzheimer's researcher at Emory University. But if you get too good at one game, quickly proceed to the next level, or try a new one altogether. Your brain is very much like a muscle: It needs constant challenge to grow.

For starters, try:

Nintendo's Brain Age, a computer game featuring a set of fun reading and mathematical exercises to be done every day.

A "virtual mental gymnasium" at My Brain Trainer, where you can calculate your "brain age" and work to lower it.

Check out our selection of games from the "brain fitness" experts at Happy Neuron.

**Buyer Beware: Ginkgo biloba**

Should you take ginkgo biloba for a memory boost? These experts make a less-than-compelling case for the supplement.

Maybe: "The jury is still out. Some studies suggest that ginkgo is useful, but more research needs to be done. If you're going to take ginkgo, you should do it with caution. It has side effects, such as reducing the ability of your blood to clot, that could be a problem if you take aspirin or a blood thinner. So check with your doctor to make sure it won't interact with your medications." Stuart Zola, PhD, codirector of the Alzheimer's Disease Research Center at Emory University

No: "A National Institute on Aging study published in the Journal of the American Medical Association found absolutely no memory benefits when normal people take ginkgo biloba supplements. And, as is true with all herbal supplements, which are unregulated, you can never be certain what you're getting in the bottle. Consumers should be very wary." Aaron P. Nelson, PhD, assistant professor, and author of The Harvard Medical School Guide to Achieving Optimal Memory

**Glass of Red for your Head**

Here's a pleasing Rx for boosting brainpower: Flex your noodle by doing crossword puzzles and brain teasers for an hour or so, then cool down with a glass of wine it, too, may help preserve your memory. According to research done by Philippe Marambaud, PhD, a compound in red wine, resveratrol, may help ward off Alzheimer's disease.

Marambaud, a senior research scientist at New York's Litwin-Zucker Research Center for the Study of Alzheimer's Disease and Memory Disorders, found in lab experiments that resveratrol hampered the formation of beta-amyloid protein, a key ingredient in plaque found in the brains of people who die with Alzheimer's disease.

Alcohol's benefits to the heart it can help lower cholesterol levels may also protect against memory loss by improving circulation to the brain, says Aaron Nelson, PhD. But remember, everything in moderation: "Drinking more than a glass won't help, and it just might hurt."

**More on Aging Well on MSN Health & Fitness:**

- The Buff Brain
- Brain Boosters

http://health.msn.com/print.aspx?cp-d...