

Win the Mind Games

Stay sharp for life with these strategies
from our brain trust

BY MATTHEW SOLAN

AT ONE POINT IN YOUR LIFE, YOUR MIND WAS A STEEL TRAP. NOW IT'S PROBABLY starting to resemble a colander. Life keeps pouring in, but you retain less and less of it. Fear not: We've created a cheat sheet that will give you the mental edge you need to survive in this cutthroat job market, plus the brain strength necessary to keep your wits about you when you finally retire. The key to all this is simple: Stop taking your gray matter for granted, says P. Murali Doraiswamy, M.D., chief of biological psychiatry at Duke University's medical school. "You can add 10 or more years to your brain's useful life just by paying some attention to it." If that doesn't sound like a fantastic return on an investment, then, well, you may have already lost your mind.

Break a mental sweat

Just as exercise builds endurance, bolstering your neurological connections creates a reservoir of stamina that you can tap later in life. Here's how to bulk up your neurons.

• **Study another language.** *Parlez-vous français? Non?* Then you may find yourself less able to stave off dementia when you're older. In a 2007 study at York University in Toronto, bilingual seniors kept the worst effects of the condition at bay 4 years longer than those who'd never ventured beyond their native tongue. Learning a second language appears to increase the density of gray matter in the areas of your brain that govern attention and memory, says researcher Ellen Bialystok, Ph.D.

Do this During your commute, play some language-instruction CDs, such as one from Macmillan's Behind the Wheel series (macmillanaudio.com, or download the MP3 version from audible.com.) Then reinforce your lessons by signing onto social-networking sites that let you

interact with native speakers. "They use functional language that you'd hear in conversation," says Marty Abbott, director of education for the American Council on the Teaching of Foreign Languages. Her favorite is hello-hello.com. Finally, rent a movie once a month in the language you're studying and watch it sans subtitles.

• **Push the cardio.** Vigorous workouts can boost your brain's error radar, say researchers from Illinois Wesleyan University. They discovered that men with high levels of

cardiorespiratory fitness were significantly better than their less-fit counterparts at identifying mistakes on a test. "Fitter guys can absorb more oxygen into their blood," says study author Jason Themanson, Ph.D. "This appears to improve the functioning of the brain's cingulate cortex, which is the source of error-detection abilities."

Do this Interval training is the best way to improve your VO_2 max, or the amount of oxygen your blood can carry and use. Trainer Craig Ballantyne, C.S.C.S., the author of *Turbulence Training*, recommends choosing a cardio workout—like running or biking—and alternating between 30-second sprints and 90 seconds at a relaxed pace. Repeat for a total of six cycles. Do this twice a week, along with two additional sessions of your regular cardio routine.

Eat and drink smarter

"Food affects your brain like a drug," says Fernando Gomez-Pinilla, Ph.D., a professor of neurosurgery at UCLA. The right nutrients will fire up neurotransmitters, strengthen communication between brain cells, and stimulate the production of neuron-protecting proteins. But a diet heavy in calories from sugar and saturated fat not only slows overall brain functioning but also makes your brain more vulnerable to free radicals—molecules that can damage tissue and ultimately lead to disease. Change your habits now to bring an end to this slide.

How many
TRIANGLES
(of any size) are in
this diagram?

Answer on next page

• **Fish for omega-3s.** Thirty-five percent of your brain consists of fatty acids, such as docosahexaenoic acid (DHA), an omega-3 that helps nerve cells communicate with one another. Another omega-3, called eicosapentaenoic acid (EPA), increases your brain's sensitivity to serotonin, a hormone that produces feelings of happiness. Both of these fats can decline as the years stack up. A 2008 University of Cincinnati study, for instance, found that the brain tissue of 65- to 80-year-olds contained 22 percent less DHA than the brain tissue of 29- to 35-year-olds. "If you want to keep your wits about as you age, start consuming omega-3s now," says William Harris, Ph.D., a nutrition researcher at the University of South Dakota.

Do this If you can't stomach frequent servings of salmon and tuna, Harris recommends taking an omega-3 supplement. We like Nordic Naturals Omega-3 (www.nordicnaturals.com), good for 330 milligrams of EPA and 220 milligrams of DHA in a two-capsule serving. It contains lemon oil to mask the fishy taste.

• **Raid the spice rack.** Sprinkle some rosemary on your entrées and side dishes. The carnosic acid found in this spice has been shown to reduce stroke risk in mice by 40 percent, according to a new study published in the *Journal of Neurochemistry*. Carnosic acid appears to set off a process that shields brain cells from free-radical damage, which can worsen the effects of a stroke. It can also protect against degenerative diseases like Alzheimer's and the general effects of aging. But rosemary is not the only "mind spice" on the shelf: Cinnamon, turmeric, basil, oregano, thyme, and sage can all protect your brain from inflammation, says neurologist Eric Braverman, M.D., a clinical assistant professor at Weill Cornell Medical College. **Do this** Shoot for 3 to 7 teaspoons of any combination of these spices each day. "Add a teaspoon of cinnamon to your morning yogurt or coffee," says Dr. Braverman. "Sprinkle basil and oregano on a sandwich, or stir a teaspoon of rosemary into tea. It'll add up."

• **Raise a glass of the good stuff.** In a 2006 University of South Florida study, people who drank three or more 4-ounce glasses of fruit or vegetable juice each week were 76 percent less likely to develop Alzheimer's disease than those who drank less. The high levels of polyphenols—antioxidants found in fruits and vegetables—may protect brain cells from the damage that may be caused by the disease, says study author Amy Borenstein, Ph.D.

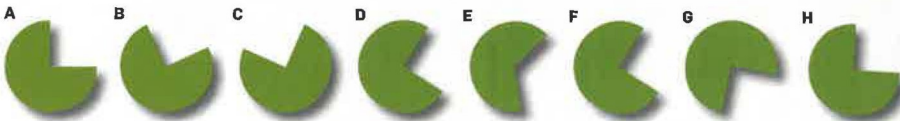
Do this See our favorite juices in this issue's poster, "The 125 Best Foods for Men."

Flex your mental muscle

Mental exercise can reduce your risk of developing Alzheimer's disease and increase your brain's efficiency, says UCLA researcher Gary Small, M.D., author of *The Longevity Bible*. Try the challenges below and on the previous page, adapted from Dr. Small's book, to give your brain its workout for the day.

1. PAC-MAN FEVER

Figure out which object does not match the others. This puzzle works the right side of your brain, specifically your visual and spatial skills.



2. KIND-OF-LIKE-SCRABBLE

See how many words you can create from the letters below. Each word can't contain a repeated letter, but must contain the letter M. This puzzle exercises your language skills, which reside on the left side of your brain.



3. JUST PLAIN HARD

Add two lines to any of the shapes below to complete the sequence. This whole-brain puzzle improves your ability to solve problems.



Let your brain kick back

Don't feel too guilty about shootin' the bull at the watercooler. A recent University of Michigan study found that people who chatted for 10 minutes before being tested for mental-processing speed performed better than those who didn't. "Social interaction seems to sharpen your memory and other brain functions because you have to process information and gauge responses, such as whether a person is being ironic or honest," says researcher Oscar Ybarra, Ph.D. No office gang handy? Try these strategies.

• **Tune in to ESPN.** This is the one you've been waiting for: A 2008 University of Chicago study shows that not only can playing a sport improve your learning and comprehension, but simply *watching* sports can boost those same skills. "Your brain appears to treat any engagement with sports—either as a player or spectator—as somewhat similar activities," says researcher Sian Beilock, Ph.D. So when Eli Manning is looking downfield, your brain is trying to mimic his thought process, not just watching him idly. **Do this** Tell your wife or girlfriend that you

must spend a few hours a week watching sports. Beilock says dedicated players or fans score the most brain-boosting points—catching a game every few weeks won't cut it.

• **Give yourself a break.** Grinding away at your job may not give you the edge you think it will. Heck, it could *blunt* your brainpower. A 2009 study published in the *American Journal of Epidemiology* shows that clocking 55 or more hours on the job correlated with lower scores on vocabulary and reasoning tests, compared with working a 35- to 40-hour week. The researchers think stress from overwork can cause impaired sleep and other problems that can slow your CPU. **Do this** "Reserve 20 minutes to lie down or sit quietly with your eyes closed, away from any stimulus," says Richard Best, Ph.D., an organizational psychologist in San Antonio, Texas. You aren't trying to fall asleep; you're simply giving your brain a breather from nonstop processing. Your recharged neurons will thank you. ■

ANSWERS: Previous page: 24; 1: E; 2: There are 43 words, including MOWED, WARM, and DREAM; 3: TUVWXY