FEATURES

NINE BRAIN-AGING "SINS" THAT KILL YOUR COMPETITIVE EDGE

Always feeling tired? Having trouble getting motivated and out of bed in the morning? Marcel Daane, a performance expert who synthesizes best practices from nutrition, exercise, and neuroscience, offers a list of tips that will help you get your energy back.

According to Daane, as demands grow and resources shrink, we all struggle to do more with less – and without proper coping skills, we slide down a slippery slope of chronic exhaustion into debilitating burnout. That's bad news for the middle-age-ish among us who feel much "older" than we should.

"Working while fatigued once in a while is okay, but when this state becomes chronic, our resilience against stress drops," notes Daane, author of *Headstrong Performance: Improve Your Mental Performance with Nutrition, Exercise, and Neuroscience* (www.headstrongperformance.net). "Enthusiasm and motivation plunge, and before we know it, we can no longer perform at our best. What's more, this endless fatigue ages us rapidly. You don't just *feel* older than your age; you *are* older. Your capacity to regenerate the cells in your body and brain falls off sharply."

That's right: Stress is a potent cause of neurodegeneration. The brains of people who are chronically fatigued show signs of shrinking, which means stressed executives have about the same brain capacity as people decades older.

"This deterioration of critical brain regions hinders memory processing, strategic planning, and the ability to manage anxiety," says Daane. "These deficiencies can knock you out of the game."

The good news is we *can* affect how fast our brain ages, depending on how we treat it throughout life. Research at King's College in the UK shows the brains of elderly people who practice a healthy lifestyle are the same as people decades younger. Daane says we may be committing predictable brain-aging "sins" on a regular basis. Here are nine of the most damaging:

BRAIN-AGING SIN #1: You regularly forgo a daily walk in favor of a flop on the couch. After a long day, it's tempting to talk yourself out of exercise with a weary, "I'm just too tired." But sedentary behavior doesn't reward your fatigued brain and body – it makes you more fatigued. It may sound counter-intuitive, but it's true: Your brain recovers better and faster when your body moves. Movement produces proteins and hormones in the brain that stimulate memory and make you more alert, notes Daane. Thus, a daily walk in the office, around the parking lot, or through the airport helps keep your energy level up and your brain awake.

"Even short bouts of exercise make a difference," says Daane. "Just 12 minutes of moderate-intensity cardiovascular exercise, such as brisk walking, improves cognitive function and oxygenation and provides energy. You'll feel the results right away."

BRAIN-AGING SIN #2: You hit the snooze button (again) and run out of time for breakfast. While you're still lying in bed, it may seem like a good idea to stay there for an extra 30 minutes at the expense of breakfast. But robbing your brain of essential nutrients in the morning is a big mistake. In the same way that an athlete needs fuel for the body to perform and recover from training, you needs fuel for your brain to perform and recover from stress. In fact, says Daane, just as an athlete's muscles shrink without proper refueling, so do your "mental muscles." Neurons in the brain die with repeated exposure to stress, resulting in a loss of brain mass and ability.

To fuel and protect your brain, start your day with breakfast, advises Daane. But don't zip through the drive-thru window for a biscuit. Instead, choose oatmeal topped with berries, cinnamon, and walnuts. This takes only a few minutes to prepare. You may even be able to hit snooze once or twice and still have time to make and eat a healthy breakfast.

BRAIN-AGING SIN #3: You skip lunch to take an emergency conference call. If your workday includes last-minute meetings, emergency conference calls, or other urgent craziness, taking time to refuel your brain can seem impossible. Interruptions can derail the most well-intentioned healthy meal plan. It may be tempting to skip a healthy lunch or snack and just keep working. But how can

a brain perform without fuel? It can't.

"The brain has a minimal capacity to store its own glucose, which is the primary brain fuel, so it relies on you to feed it regularly," says Daane. "When you skip meals, the regions of your brain responsible for self-regulation, empathy, and solution-based thinking begin to shut down. You become hyper-responsive to stress, brain cells in your memory processing centers die, and your brain ages more rapidly. Bring your own healthy lunch or snacks to work, so you have food available no matter how crammed your day becomes."

BRAIN-AGING SIN #4: You don't stock up on good snacks (so you naturally grab bad ones when temptation strikes). Stress and fatigue are notorious triggers for bad-food binges. That's why many people grab chips or cookies and mindlessly devour them while multitasking. Daane says the problem is that stress causes chronic brain inflammation, and processed foods like cookies, sodas, and cakes only add fuel to the inflammation fire. They speed up brain cell destruction from stress, resulting in memory decline similar to what we see in Alzheimer's patients.

"If your workplace (or your home) is stocked with cookies, sodas, candies, and chips, of course you'll reach for them when stress hits," says Daane. "The remedy is to plan ahead. Bring your own healthy snacks – those that build memory capacity, improve physiological brain balance, help you perform complex mental tasks, reduce symptoms of stress and anxiety, and keep you focused – and eat them instead."

Daane suggests an apple or banana with a handful of almonds or walnuts. Bananas are a quick source of glucose and potassium, and potassium improves physiological brain balance. Cottage cheese is another good option because it includes whey protein that's been shown to remove symptoms of stress and improve cognitive function. Bring a container of chopped celery, carrots, and broccoli with organic almond or coconut butter for dipping. Finally, you can top anything with almonds, which improve cognition and memory.

BRAIN-AGING SIN #5: You swill coffee and soda instead of water. You may think your morning jolt of caffeine is revving you up, but it really isn't. Yes, it creates a momentary lift as it blocks neurons in the brain that make you feel tired, but the lift quickly declines and fatigue sets in. The more you consume, the greater the impact of stress on your brain, and the more dehydrated you become. The best hydration is water, which transports nutrients and oxygen into your tissues and brain cells.

"Without enough water, our bodies and brains can't function properly," says Daane. "Dehydration leads to serotonin deficiency, which means less stress-resilience, more depression, poor sleep, and memory loss."

How much water should you drink to keep your body and brain hydrated? Daane recommends a half-ounce to one ounce of water per pound of bodyweight per day. So someone who weighs 150 pounds needs between 75 to 150 ounces of water per day. An easy solution is to keep a 20-ounce water bottle with you at all times and refill it at least three times a day. Your brain and body will thank you.

BRAIN-AGING SIN #6: You regularly "relax" with an after-work beer or a nightcap. No one is saying you have to be a teetotaler. The occasional drink with friends is okay. But don't go beyond one 250-ml glass of wine or two 8-oz glasses of beer a day — at most. Any more and you're accelerating the aging of your brain. Alcohol is not so much a relaxant as it is an anesthetic combined with a stimulant, notes Daane. During a stressful day, the brain cells in the hippocampus (our memory-processing center) are stretched beyond capacity. As we drink alcohol, our brains are anesthetized and overstimulated, which causes additional trauma to the hippocampus and compounds the damage. The brain can recover from the occasional trauma of drinking, but if it's too much and too often, it loses its capacity to recover.

"There are more effective ways to recover from stress," insists