

YOUR GOOD HEALTH

Boost your brain

To optimize brain capacity, you need to rest and rejuvenate, experts say

By Encarnacion Pyle

More Content Now

Everyone knows what to do to keep their heart healthy, but what about the brain?

While much of the brain remains a mystery, there is a growing movement to find ways to unlock brain potential so we can live healthier, perform better and eventually delay diseases of the brain.

"Take Alzheimer's or Parkinson's, there's underlying brain degeneration going on for decades before there are outward signs of disability," said Dr. Ali Rezai, a neurosurgeon at Ohio State University's Wexner Medical Center.

"If we could detect these things earlier, you would have more brain capacity to improve and could think about what you would change."

For these and other reasons, researchers are exploring ways to measure, analyze and improve brain function, said Rezai who directs Ohio State's Neurological Institute and Center for Brain Health and Performance.

The discoveries will be used to help people manage factors that affect brain performance and find ways to more rapidly replenish reserves.

It's such a hot topic that Wexner Medical Center will host its second three-day Global Brain Health and Performance Summit in April. The event, which begins April 27, will feature scientists, researchers and athletes who will discuss technologies that measure physiological responses related to brain health.

They'll also talk about lifestyle practices, such as exercise, mindfulness, nutrition and sleep, and how they affect those on the battlefield and playing field and in everyday life.

Think of your brain as a cellphone, Rezai said, and neurocapacity as your cellphone's memory.

Your brain can run only so long without having to be recharged, and it can't operate at 100 percent all the time, he said. And if your brain's capacity isn't well-managed or isn't large enough, it won't operate well.



That's why we need to eat well, get a good night's sleep and take other measures to rejuvenate, Rezai said. And it's never been more important to figure out how best to recharge our brains than now when people seem to be wired into technology 24/7.

"With cellphones, computers, gaming machines, tablets and TV, it's a constant onslaught of stimulation," he said.

Not controlled, the blue light emitted from electronic devices such as these can disrupt our circadian rhythm and jeopardize the restful sleep our brains so desperately need, he said.

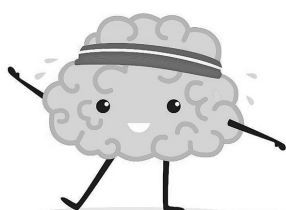
Research suggests that the following may help you maintain your brain health:

1. Be physically active three times a week for at least 30 minutes
2. Eat a healthy diet of meals mostly made of plants, while limiting the amount of red meat, dairy and saturated fat you consume
3. Keep your mind active by learning new things and being engaged socially
4. Maintain good heart health by quitting smoking, reducing alcohol and sodium intake and keeping healthy cholesterol levels
5. Protect your head from injuries by wearing a seatbelt when riding in a car and a helmet when cycling

—Centers for Disease Control and Prevention

While adding convenience to our lives and making us more productive, these "always-on, always-connected" devices have other drawbacks as well.

"Sometimes technology can make our brains lazy," said Dr. Janet Bay, a neuro-



FREEPIK IMAGES

surgeon and vice president and lead physician for neuroscience at OhioHealth.

Instead of figuring out how much you want to tip your waiter for dinner in your head, for instance, you might look it up on your phone. Can't spell a word? Just ask Alexa or Siri.

People's increasingly hectic lifestyles and the rapid aging of the population — by 2050, more than 89 million Americans will be 65 or older — also makes it important to get a better understanding of the brain-body connection.

The average brain weighs about 3 pounds and comprises the cerebrum, which performs higher cognitive functions such as reason, planning, memory and sensory integration; the cerebellum, responsible for motor functions and balance; and the brain stem, dedicated to involuntary functions like breathing, heart rate and blood pressure.

To borrow a term from the computer world, the brain is the body's operating system, Rezai said. And though it is less than 2 percent of the body's weight, it uses 20 percent of the body's energy.

The majority of the energy consumed powers the rapid firing of millions of neurons that communicate with each other. Scientists believe much of this activity gives rise to the brain's higher functioning.

While the notion is alluring that people employ just 10 percent of their brains and if they could only tap into the other 90 percent, Bay said, it's just a myth.

"Your brain is never silent and is always working in the background," she said.

—Email Encarnacion Pyle at epyle@dispatch.com.

Available for Emergencies, Consultations
and All Your Dental Needs

SAM PENNISE, DMD

Office...28 Mechanic St.,
Hammondsport
607-569-2242

Res....Hammondsport...607-569-2143

As Always, Accepting New Patients!
Appointments Available Daily
Mastercard & Visa Accepted

"ON THE VILLAGE SQUARE"
Hammondsport

Water Street Pharmacy, Inc.

14 Water Street
Dundee, NY
14837
607-243-8114

One Hour Photo Lab

Professional Healthcare
Hometown Hospitality
Tracey L. Knapp, RPh President