

# Tips to maintain and improve brain health

While there are still mysteries surrounding the fundamental process of memory, research has revealed activities that may enhance memory and promote overall brain health.

John H. Byrne, Ph.D., professor and chairman of the Department of Neurobiology and Anatomy at the University of Texas Health Science Centre at Houston (UTHealth) Medical School, studies the neuronal and molecular mechanisms underlying learning and memory. Here are three tips he offers for maintaining and improving brain health.

## 1) Exercise

"Everyone knows that exercise is good for the heart, but what they may not know is that exercise also appears to be good for the brain," said Byrne, the June and Virgil Waggoner Chair. "There is a lot of recent evidence demonstrating that exercise itself promotes neurogenesis - the generation of new nerve cells in the brain. It had long been believed that once you lose nerve cells, they are gone for good and the brain cannot regenerate them, but exercise appears to inspire the brain's ability to generate nerve cells."

## 2) Diet

"There are certain 'brain foods' that seem to have a benefit on the brain," Byrne said. "New research shows that Omega-3 fatty acids, such as those found in salmon and other fish, may build the brain's gray matter. Foods and beverages that are rich in antioxidants may also help keep the brain sharp. For brain food, consider a glass of red wine, some salmon, blueberries, a little bit of chocolate or a cup of green tea. Foods, indeed, can play a role in brain health, but remember, everything in moderation. Research shows that those who are obese have a higher incidence of Alzheimer's disease and other diseases that affect the brain. Staying slim appears to promote brain health, so exercise, watch your calories and eat the right type of food."

## 3) Brain activity

"You've heard the saying, 'Use it or lose it.' It's true," Byrne said. Those who are intellectually active have a lower incidence of Alzheimer's. You must exercise your brain cells just as you exercise your muscles, so read a book or do a crossword puzzle. Those types of activities can protect your brain. There is also evidence that social activities help to promote brain health. Interacting with others stimulates the brain."

Source: University of Texas Health Science Centre at Houston Medical School