

# Why do we always remember THE BAD TIMES?

## \* HEALTH

That's because there is a protein in your brain that makes sure the bad memories lie stuck there. But here's the good news: This protein could help cure Alzheimer's and post-traumatic stress disorder. iTALK tells you how

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Memories are treasured. They help us recognise faces of old classmates, that song we listened to when we were in love. Now, scientists may have discovered a glue that keeps fearful memories stuck in the brain — a discovery that could prove useful in new treatments for Alzheimer's disease and post-traumatic stress disorder. The glue, protein beta-catenin, is the key to maintaining the structure of cells and essential for embryonic development, a new study

suggests. It acts like Velcro, fastening a cell's internal skeleton to proteins on its external membranes, that in turn connect them to other cells.

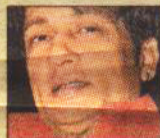
**How will it help?** Medications that inhibit beta-catenin could interfere with memory formation after trauma and help prevent post-traumatic stress disorder. Conversely, drugs that enhance beta-catenin could be a new way to treat memory disorders, such as Alzheimer's disease. Currently though, there are no other drugs besides lithium that target beta-catenin.

## WHAT IS YOUR SCARIEST MEMORY?



**GAUHAH KHAN**  
Model

Last year, on Diwali, I got sick thanks to air pollution caused by crackers and was hospitalised for ten days.



**SHEKHAR SUMAN**  
Actor

I lost my elder son Aayush, and it's the worst memory I carry. But I'm happy I do because he seems to be around.



**SUCHITRA PILLAI**  
Actor

It's the memory surrounding the death of my dogs Tango and Jeremy. I carried Tango and cremated him myself.

## Stress and smoking can cause memory loss



**JYOTI LALWANI**  
Consulting Dietician

A nutritious diet helps improve your memory. Fruits, vegetables, whole grains, and "healthy" fats are beneficial. A 30-minute walk or any form of exercise is a must. Regular exercise ensures the oxygen supply to the brain is increased. It also helps burn extra calories. Hence, this reduces the risk for disorders that lead to memory loss.

Cortisol, the stress hormone, can damage the hippocampus (the area of the brain responsible for memory), if the stress is unrelieved over long periods. We all know stress affects our concentration, which is vital for storing memory. Smoking heightens the risk of vascular disorders, that can cause stroke and constrict arteries that deliver oxygen to the brain. Even alcohol has an effect on temporary memory loss.

## Nerve cells are like the hard disk of a computer



**DR HEMANT BELSAREY**  
Consulting Psychologist

Memory is stored in the nerve cells of the brain. Nerve cells are similar to the hard disk of the computer. Instances are received in as memory by the five sensory organs, which are then attended to by the mind. The mind then decides their importance and stores the memory, either in the short term or long-term space. In the short-term space, the memory stays for 20-30 seconds. If considered important by the mind, it gets classified and stored as long-term memory. Long-term memory is either semantic (deals with the meaning of words and concepts) or episodic (related to occurrence of certain events).

- ▶ Tip of the tongue phenomenon is when a person can remember a face but not a name.
- ▶ Faulty storage is when a person can't correctly correlate a name with the image.

My worst memory is of losing my grandparents and eventually, the house they lived in. As a kid, I loved staying with them in the suburbs. I hated going back home to Bandra, since both my parents worked, and I was alone with the maid.

**VIDYA MALVADE,**  
ACTOR

## What is memory?

When an event occurs, when you learn something, or when you meet someone, your brain determines whether that information needs to be saved. If your brain judges the information as important, it places it in your memory "files". The hippocampus

## Emotional Memory Management (EMM)

EMM is concerned with the thinking part of brain functioning. The brain has the ability to store memories and emotions — as they occurred at the time the memory was made. Memory files thus contain two parts, the information about the event and the feeling at

## How are memories made?

We go through different experiences. A specific memory area of the brain will hold memories for about five days, to see if they are important. Memories that are not important are usually "dumped" after the five-day waiting period. These erased memories can never be recovered. A memory is stored in long-term storage or

## 4 steps to improve your memory

- ▶ Say it out loud. It helps your brain recall because, you hear the information.
- ▶ After learning something, ask yourself "What I just read?" Quiz yourself.
- ▶ Keep the brain active by playing brain games such as sudoku, chess, and solving crossword.
- ▶ Eat food rich in Vitamin B, especially B6, B12, folic acid. These include dark green leafy vegetables like spinach, fenugreek leaves, brocc