

- Sleep

Reset your brain with a nap

The Star Malaysia · 2 Feb 2026 · 10

EVEN a short afternoon nap can help the brain recover and improve its ability to learn.



In a study published last Thursday in the journal *Neuroimage*, researchers at Germany's University of Freiburg and Switzerland's Geneva University Hospitals and University of Geneva, show that a nap is enough to reorganise connections between nerve cells so that new information can be stored more effectively.

Until now, these effects were only known to occur after a full night's sleep.

The researchers examined 20 healthy young adults who either took a nap lasting an average of 45 minutes or stayed awake on two afternoons.

Since direct measurements on synapses in healthy humans are not possible, they used established, non-invasive methods such as transcranial magnetic stimulation (TMS) and electroencephalogram (EEG) measurements to draw conclusions about the strength and flexibility of the synapses.

The results showed that after the nap, the overall strength of synaptic connections in the brain was reduced – a sign of the restorative effect of sleep.

At the same time, the brain's ability to form new connections was significantly improved.

The brain was therefore better prepared for learning new content than after an equally long period of wakefulness.

“The study shows that this ‘synaptic reset’ can happen with just an afternoon nap, clearing space for new memories to form,” says study leader Prof Dr Christoph Nissen.

This process could be particularly beneficial for situations with high work load.

Especially in professions or activities that require a high level of mental or physical performance – such as in music, sports or safety-critical areas – a nap could be used to maintain performance.

“An afternoon nap can sustain performance under high demand,” he notes.