



Partial eclipse Hot, dry weather has left the Moon Pond at the Studley Royal Water Garden near Ripon, North Yorkshire, full of pondweed. Five-day forecast, page 49

Running as good as a nap to help cope with sleep deprivation

Eleanor Hayward Health Editor

If you are feeling exhausted after a sleepless night, the temptation is often to slump on the sofa while drinking several cups of coffee.

But a new study suggests that going for a jog or doing a short workout may in fact be the best strategy for countering the effects of sleep deprivation, including memory loss.

Researchers at McGill University in Canada found that 20 minutes of exercise was just as effective as a 90-minute nap for keeping the brain sharp while operating without sleep.

They ran a trial involving 54 healthy young adults who were made to stay awake for 30 hours under lab supervision. The volunteers were then assigned to one of three groups, doing a 20-minute cycling session, taking a 90-

minute nap or facing control conditions.

They were tested on their memories, being shown a series of images and then asked three days later to recall what they saw. This revealed that those who exercised or napped remembered significantly more images than participants who did neither, scoring 22 per cent higher on average.

The study found that exercise was a "promising tool" to stay sharp for those working night shifts or struggling with insomnia, and it was often easier to implement than a nap.

The group who exercised also did not feel any more tired than those who did not exercise.

Marc Roig, a professor at McGill's physical and occupational therapy school and one of the study's authors, said: "Sleep loss affects nearly every as-

pect of how we think and function, but many people can't simply stop what they're doing and get more sleep. Our findings show that even a brief bout of exercise may help preserve one of our most important cognitive abilities."

The researchers stressed that "exercise cannot replace the many functions of sleep", but it might help people function better when getting enough rest was not possible.

Madhura Lotlikar, a study co-author, said: "A nap isn't always possible in the middle of a shift. Exercise is accessible, inexpensive and easy to implement. That makes it a promising tool to help people stay cognitively sharp when sleep is limited."

The research, published in the journal *PNAS*, found that both exercise and napping protected memory, but through different mechanisms.

Participants had their brain activity recorded, which showed that napping appeared to help the brain recharge, making it easier to take in and remember new information.

By contrast, exercise helped the brain use its remaining resources more efficiently, without making participants feel more tired.

The authors said their findings could be particularly useful for shift workers in safety-critical industries, such as doctors, nurses and transport drivers.

Working night shifts has been shown to increase the risk of several mental and physical health problems, including depression, diabetes and heart disease.

The NHS says that most healthy adults need seven to nine hours of sleep a night, although the exact amount may differ for each person.

Vaping helps smokers quit better than other methods

Poppy Koronka Health Correspondent

Vaping helps people to quit smoking more than any other cessation method, a review has found.

Using e-cigarettes was more effective than other methods such as nicotine gum or spray, researchers have said.

About four more people in 100 had stayed off cigarettes after six months when using vapes, when compared with patches and gum. The analysis of 80 randomised controlled trials, involving nearly 30,000 participants, also found that there was no evidence of

serious increased risk of harm from using e-cigarettes and vapes to quit.

While vapes were "unlikely to be completely risk-free", they were "less harmful than smoking", experts added as they called on stop smoking services to offer a range of products to help people in their attempts to quit.

"We have very strong evidence that regulated nicotine e-cigarettes are substantially less harmful than smoking," said Dr Jamie Hartmann-Boyce from the University of Massachusetts Amherst, senior author of the Cochrane Review. "Based on the consistency of

the findings, it's clear they are a proven and viable option for people wishing to quit traditional cigarettes. This update includes nine new trials and our main conclusions haven't changed."

Researchers found that vape use "increased quit rates compared to nicotine replacement therapy", such as gum or patches, with vaping leading to a 61 per cent increased chance of an attempt to quit being successful after six months.

This means that for every 100 people using nicotine e-cigarettes to stop smoking, eight to ten might successfully stop, compared with six of 100 us-

ing nicotine-replacement therapy. Vapes containing nicotine outperformed those without, helping more people to quit.

Caroline Cerny, deputy chief executive at Action on Smoking and Health, said: "Around two in three people who smoke long term will die from a tobacco related illness, so it's vital we support people to stop smoking."

"This review confirms that vapes are not only a highly effective quit aid, but that they are also far less harmful than smoking and are a key part of reducing the harm from tobacco."

Quintagram® No 2656

Solve all five concise clues using each letter underneath once only

1 Pent-up worry (5)

2 Faint (5)

3 Great success (7)

4 Childish fit of temper (7)

5 Insectivorous nocturnal bird (8)

A	A	A	G	G	H	H	I
I	J	M	M	N	N	N	N
O	O	P	R	R	R	S	S
T	T	T	T	T	U	U	W

Solutions see T2 MindGames p15
Cryptic clues T2 MindGames p14

Killing over fake Rolex

A student who stabbed a former friend through the heart in a row over a fake Rolex has been jailed for ten years. Harper Dennis, 19, attacked Khaleed Oladipo, 20, in Leicester on February 3. A jury at Leicester crown court found him not guilty of murder but guilty of manslaughter.

Rom-com's second date

A sequel to *How to Lose a Guy in 10 Days* is in the "very early days" of development, with Paramount in search of scriptwriters. Kate Hudson, who will produce with Stacey Sher, and Matthew McConaughey are intended to reprise their roles from the 2003 romantic comedy which made \$177 million, sources confirmed.



Keeler between sheets

A 30-shot contact sheet of a nude Christine Keeler taken by David Bailey will be auctioned at Sworders in Stansted, Essex, on October 6, with a guide price of £1,200. Keeler, who gained infamy after an affair with John Profumo, died aged 75 in 2017. The sheet belonged to a friend of hers.

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