

What the scientists are saying...

Weekend lie-ins are not enough

Having a lie-in at the weekend does not make up for burning the candle at both ends during the week, researchers have warned. For their study, the team at Penn State University in the US recruited 30 adults with normal sleep patterns and put them on a 13-night schedule in a sleep lab. For the first four nights they slept for eight hours; on the next six nights they were woken two hours earlier; then for three nights in a row, they were allowed to sleep for ten hours. At various intervals, they were given blood tests and asked to play a game to test their attention levels, said *The Times*. The results from these tests showed that while two lie-ins helped return levels of stress hormones to normal, they did not improve levels of attentiveness in the participants who had become drowsy when their sleep was cut short.

How depression gets passed on

Women who suffer from depression during pregnancy are more likely to have children who become depressed in their teens, reports BBC News online. This may be because the developing foetus is affected by exposure in the womb to the stress hormone cortisol, said Dr Rebecca Pearson, of the University of Bristol, who led the study. And unlike with postnatal depression, the untreated expectant mother cannot protect the child from the effects of her illness. Postnatal depression was also found to be a risk factor for depression in adolescents – but only in cases where the mother had a low level of educational attainment. The mental state of the father during pregnancy had no impact. Dr Pearson's study, based on figures obtained during the ongoing Children of the Nineties project, found that 11% of adolescents born to women who'd suffered



Pangolins are a delicacy in Asia

from depression while pregnant also suffered; among women free of depression during pregnancy, the figure was 7%.

Trying to save the pangolin

Time is running out for the pangolin, conservationists have warned. The mammals – with reptilian scales – are being slaughtered at an alarming rate, and now risk extinction, reports *The Independent*. Long hunted as bush meat in parts of Africa, they are also considered a delicacy in Asia, while their scales are ground up and used in traditional Chinese medicine. Trade in pangolins is already banned under international treaties, but trafficking continues, and now two species – the Chinese and the Sunda (Malayan pangolin) – are likely to be designated as “critically endangered”, amid concerns that they could disappear in Asia within 20 years if more is not done to protect them. Populations in China have declined 94% in the past 50 years. On account of their

habit of rolling up into a ball when threatened, pangolins are easy prey for poachers; but once caught, they make such determined efforts to escape that some illegal traffickers have nailed their tails to the floor to stop them.

A waterlogged planet far far away

Scientists have detected a lost world of rocks and oceans orbiting a dying star 150 light years away – an indication that habitable planets exist beyond our solar system, reports *The Independent*. Now, it consists of just dust and debris, but astronomers believe the body is what remains of a minor planet that was pulled so close to its star (a white dwarf, which has exhausted its fuel) that it was all but destroyed. Telescopic analysis has revealed lots of oxygen (too much to have been bound up only in rock) – suggesting the presence of water. In fact, astronomers estimate that the planet was 26% water; by contrast, Earth is “dry”, with a mass containing just 0.023% water. They also found little or no carbon, which made it safe to assume that it was a rocky asteroid and not a carbon-rich comet. “The two ingredients – a rocky surface and water – are key in the hunt for habitable planets outside our solar system, so it's very exciting to find them together for the first time,” said Professor Boris Gänsicke of the University of Warwick.

Medical file

The use of statins – drugs prescribed to eight million Britons to combat high cholesterol – has reduced the incidence of strokes by 40% since 1995, new research suggests. Better treatments for high blood pressure, health campaigns and healthier lifestyles are also believed to have played a part, reports *The Daily Telegraph*.

The abominable snowman's DNA

In the high Himalaya, dozens of climbers have spotted, or seen evidence of, the yeti – a tall, hairy ape-like creature that stands on two legs. Even Reinhold Messner, the first man to climb Everest without supplementary oxygen, believes in the mysterious creature: he had a sighting in 1986. Now, science is coming around to his side. In an “exciting and completely unexpected” development, reports the *Daily Mail*, Oxford University geneticist Professor Bryan Sykes has extracted DNA from two “yeti” hair samples, found 800 miles and several years apart, and discovered that it exactly matches DNA taken from an ancient Nordic polar bear jaw. That bear lived more than 40,000 years ago, a time when polar and brown bears were separating into two distinct species.



Do yetis really exist?

The finding raises the possibility that the yeti does exist, but is not a member of a “lost” hominid species – rather, it may be a subspecies of the brown bear. That would tie in with Messner's own research. He uncovered an image in a 300-year-old Tibetan manuscript of a “Chemo” – a local name for the yeti – with text alongside which read (in translation): “The yeti is a variety of bear living in inhospitable mountainous areas.”

A wireless pacemaker

A “wireless” pacemaker has gone on sale in Britain for the first time and could soon be available on the NHS, reports BBC News online. The device – which is ten times smaller than a conventional pacemaker – relies on a built-in battery that lasts between nine and 13 years. Inserted through a catheter, it is designed to be easily retrievable, so that it can be replaced with minimal surgery. Its manufacturer, St Jude Medical, recently obtained a CE approval mark for the device; it's available to private patients, and the company is hoping that the National Institute for Health and Clinical Excellence (Nice) will recommend it for the NHS. However, Professor Jeremy Pearson of the British Heart Foundation warned that the development of leadless pacemakers was in its “early days”, and that more work was needed to determine their reliability.