Boris leads charge of the bike brigade

I t was thought to be the largest cycling festival to be held in Britain — and it was championed by Boris Johnson (Farhia Karim writes). The Mayor of London, joined by sporting celebrities such as Matt Dawson, James Cracknell and Holly Gurnell, and 16,500 other cyclists, set off early yesterday from the Queen Elizabeth Olympic Park in East London for a 100-mile ride through Surrey and back to The Mall.

This is a great day for cycling, and for this city,” Mr Johnson said afterwards. “I want to thank the organisers and the wonderful crowd who made all the difference as we cycled by, helping to spur me on to finish in a respectable eight hours.”

The race was one of four events for the Prudential RideLondon festival, which attracted 55,000 cyclists and which will take place again next year.

On Saturday, the women’s criterium race in St James’s Park ended in disaster for the Olympic gold medallist Joanna Rowsell when she broke a collar bone after a pile-up. Rowsell, who won her medal in the team pursuit, wrote on Twitter: “Well this is far from ideal. In hospital with a broken collar bone. Thank you for all the messages. I will bounce back!”

French winner, page 52

Tattoo tells athletes they are about to ‘hit the wall’

Tom Whipple Science Correspondent

Runners call it “hitting the wall”. Or, to borrow another phrase from the world of athletics, “crashing”. It is that feeling when blood sugar gets dangerously low, muscles stop working and the men are carried from the boys.

Now a US scientist has made a temporary tattoo that, he believes, will help athletes to know when it will be before it becomes an issue. Professor Joseph Wang, from the University of California-San Diego has designed a sensor that monitors lactate levels in sweat.

When people hit the wall, their muscles have run out of fuel. In normal exercise, muscles metabolise aerobically, using oxygen. But during intense exercise, tissues cannot produce enough energy and they take in glycogen — an energy store in the muscles. An early warning that glycogen is running low is the production of lactate, which leads to lactic acid in the muscles, causing the sensation of hitting the wall.

Previously, the only way to test when this was happening was by taking a blood sample, which is not conducive to endurance training. In a paper published in the Journal of the American Chemical Society, Professor Wang describes a new sensor, similar to a temporary tattoo, that monitors lactate and sends an electrical signal to a device.

“This type of continuous monitoring means we can follow lactate in real time,” Professor Wang said. He is in talks with major sports brands and anticipates that the disposable tattoos will cost around $2 each and will display their results on a smartphone.

The technology to produce flexible, wearable electronics is still new, and Professor Wang and his colleagues hope that this will just be the first application. “There is also the military, and we are looking at medical uses, to monitor the elderly.” Another potential application could be bigger than the rest combined. “We are trying to measure the hydration and condition of the skin. There’s a big market for women interested in skincare.”

Tests can lead to cure for early type of hypertension

Chris Smyth Health Correspondent

Thousands of people with high blood pressure in their 30s and early 40s should be tested for benign growths that could allow them to be cured, researchers say.

Cambridge scientists have developed a technique which could help to identify 10,000 people a year whose condition could be reversed by keyhole surgery.

About half a million people in Britain are thought to have high blood pressure, caused by small nodules on the adrenal gland above the kidneys. This is about 5 per cent of all those with the condition.

In a paper in Nature Genetics, the scientists show that these nodules have genetic mutations which allow too much sodium and calcium into the gland, which are known to cause high blood pressure. Professor Brown said. “The point of our research is to highlight the need for earlier detection and cure. It’s really a win-win because they avoid a lifetime of treatment.”

Jeremy Pearson, associate medical director at the British Heart Foundation, which part-funded the study, said: “It is an exciting development, as this group of patients can be completely cured of high blood pressure once they have been identified, so the quicker they are diagnosed the better.”

Father drowns as he tries to save his sons

A man who died in rough seas off a North Wales holiday village is believed to have been trying to save his sons (Will Gant writes).

The holidaymaker, in his 40s, was on a beach with his wife when he saw the two boys being swept out. He dived in to help them but was carried away by the breakers at Rhosneigr Beach, in Anglesey, North Wales.

The younger boy clambered to safety on the rocks, but the man and older boy were swept away. They were airlifted to hospital but the father could not be revived. His son was yesterday in a critical condition at a hospital, where he was said to be “improving”.

Jailed teacher moved

A school teacher who was jailed for abducting one of his pupils and taking her to France was moved to the country’s newest jail for sex offenders after the teenager tried to contact him. Jeremy Forrest, 30, is to be moved from Lewes jail to Ashfield jail, near Bristol. The girl, who is now 16, has said that she still loves Forrest and intends to wait for him. She has written to him in prison and has also repeatedly telephoned the jail.

Explosive discovery

A metal detector enthusiast took home a piece of metal unaware that it was a live Second World War bomb. Wayne Ellison, 49, found the device near Waterlooville, in Hampshire, but called the police only when his wife expressed concern. An Army bomb disposal unit detonated the bomb in a nearby field. “I dug it up thinking it was a bit of aluminium and I thought I’d just flog it,” Mr Ellison said.

WWYH smiley face . . .

In this digital age, text messages may be the most popular way of sending wish-you-were-here messages to friends while on holiday, but postcards run them a close second, according to a poll by the Lonely Planet Traveller magazine. A poll of 1,563 Britons showed that the digital camera is the travel essential for 60 per cent of people, while books (54 per cent) are more popular than mobile phones (26 per cent).

Two-tone Pink Lady

A Pink Lady apple has failed to live up to its name. Found by Wayne Ames, 41, of Portsmouth, it is half red and half green. Mr Ames said: “It looks like two different apples have been welded together. You see the odd green. Mr Ames said: “It looks like two different apples have been welded together. You see the odd funny-shaped potato in this job but in eight years I’ve not come across anything quite like this.”

Film nostalgia for 80s

Britain has voted the 1980s the best decade for films, with E.T. the Extra-Terrestrial voted the best childhood movie. A poll commissioned to mark the launch of Samsung Smart TV’s The Times Recommendation technology found that Steven Spielberg, who directed the 1982 classic, is the nation’s favourite director. The film that people voted to watch again and again was The Shawshank Redemption.