

CYCLOPEDIA

Questions answered, subjects explained – Cyclopedia is your bimonthly cycling reference guide

Right: Alamy; Far right: Sam Jones



Vitamin D deficiency is fairly common in Northern Europe

Left: Alamy

as appropriate for the weather, will give adequate production of vitamin D to avoid deficiency all year round. It seems that, once again, regular cycling is advised to keep you healthy and prevent problems!

Dr Kate Hattersley

Technical

Repair kit let down

Q I have two strips of Weldtite Cure-C-Cure innertube patches. One strip has the rubber sandwiched between metal foil and a thin paper layer. In use, foil and paper are easy to remove. The other (newer?) version has a film of clear plastic instead of paper, and is backed with metallised plastic. It is difficult to separate the two plastic layers; the patch sticks equally well to either side. Having stuck down the patch, the plastic film, unlike paper, is impossible to remove without lifting the patch – assuming one is not carrying a scalpel, tweezers or scissors. What's the correct procedure when using these wretched things?

Mike Smith

A Your patch manufacturer is not the only offender: most puncture repair patches sold today have a clear film on the non-stick side. Two approaches seem to work. As a temporary measure, the plastic film can be left in situ once the patch is stuck, replacing talc in the short term as a means of preventing the excess glue on the tube from sticking to the inside of the tyre.



Punctures are annoying enough without patches peeling off...

Q & A

Health

Vitamin D: how much?

Q I read recently that the elderly (which probably includes me) would benefit from vitamin D supplementation. My diet includes items like oily fish and chestnut mushrooms, and like most cyclists I get my summer vitamin D from sunlight. I generally don't take vitamin supplements. How does one diagnose a deficiency? **Antonish, via the Cycling UK Forum**

A This is very topical as studies have shown that having a low vitamin D level is associated with a poor outcome in hospital treatment for Covid-19 infection. Symptoms of a low vitamin D level include bone pain, muscle weakness, and fatigue. Living in Northern Europe and not getting adequate exposure to sunlight makes this a very common condition in the UK, especially in the winter months.

The UK government has advised we should all take 400iu supplements daily. If your diet is already healthy and you choose vitamin D rich items, this may be unnecessary. Studies suggest that just nine minutes of full midday sun exposure from March to September, dressed

Your Experts



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Coronavirus

For up-to-date cyclists' advice regarding Covid-19, visit: cyclinguk.org/coronavirus

Alternatively, use a craft knife blade (I carry one on my repair kit) to slice the film (carefully) across the middle of the patch so the film can be peeled away from the centre, obviating the risk of peeling the edge of the patch away from the tube. (Some patches, such as Rema Tip Top, are designed so that the plastic film will separate at the centre without needing to be cut.) Provided the rubber solution is given at least three minutes' drying time, it should bond with the patch strongly enough to prevent the edge lifting in any case.

Richard Hallett

Legal

Helmet camera risks?

Q Seeing many more cyclists with cameras and or lights on their helmets, I was wondering what safety implications this has for the helmet in an accident. I read that the camera on Michael Schumacher's skiing helmet may have affected the severity of his injuries. If you had an accident after fitting an accessory to your helmet, would the manufacturer use the disclaimer that you had modified the equipment to reject any potential compensation claim?

John Caulton

A Bike- and helmet-mounted cameras are proving useful in situations where cyclists may be gathering evidence of traffic violations and in personal injury claims arising from road traffic accidents. Do helmet cameras carry a risk? This is not a legal question and thus beyond my remit but, from a perusal of other sources, any

potential risk appears to stem from two main factors: how the camera is affixed; the size of the camera.

In relation to the former, it is never a good idea to drill holes into a helmet. Doing so will compromise its integrity so it may no longer be able to protect against, or mitigate, an injury. As for the size of the camera: in some circumstances, the added bulk of the camera may cause extra strain on the head and neck, increasing the risk of injury. It has been suggested that the safest cameras/mounts to use are ones that are designed to break away (or become unglued in the case of adhesive mounts) during an impact, thus reducing the risk of the camera causing/contributing towards an injury.

Looking through various instruction manuals and warranty details, the instruction/advice tends to centre around: do not drill into your helmet; and check with your helmet provider which cameras are compatible. Therefore affixing a light or camera, so long as the product/installation is approved, should not invalidate the helmet's warranty.

It is important to point out that a helmet warranty will typically only cover the cost of replacing the helmet. Most manufacturer warranties will have a clause which states they will not be liable for injuries resulting from an accident. Whether this clause would be upheld in court would be dependent on the circumstances.

Obviously numerous accidents are caused by the negligence of third parties, from whom you would be justified in seeking compensation for any injuries suffered. Evidence provided by forward/rear facing cameras can be invaluable in helping establish the facts of the case and identifying who is at fault for the incident.

Richard Gaffney

Dan Joyce adds: Coincidentally, I looked into this recently. TRL research commissioned by the BBC (bbc.co.uk/safety/resources/safetynews/helmet-cams) found that attached cameras didn't in fact cause the helmets to fail the injury threshold standards in laboratory tests. That said, helmets are only actually certified to meet standards such as EN1078 in their as-sold, unmodified state.



The Burrows 8Freight cargo bike has an offset rear wheel

Technical

Non-centred wheel

Q I own a Specialized Creo with a 110x12mm front axle. I wanted a spare front wheel so purchased a Mavic Ksyrium, only to find the axle was 100x12mm – 10mm short. As an experiment, I used a 10mm spacer over the through-axle on the non-disc side to take up the gap. Of course, the wheel was not centred in the fork. I then rode for 50 miles with no handling or braking issues. It looks wrong but is there a practical or technical reason why the wheel needs to be centred?

Mike Joseph

A Your experiment has confirmed results obtained some decades ago by a major continental cycle manufacturer, which made a series of frames with specific misalignment conditions including offset but parallel (both 'square' to the ground) wheels. Provided this is the case, the bicycle will handle well. Indeed, large numbers of BMW motorcycles were made with the rear wheel offset to accommodate a shaft drive. Significant effects on handling are found if the wheels are not parallel in the vertical plane, which makes the cycle steer to one side.

Richard Hallett

Get in touch

EMAIL your technical, health, or legal questions to editor@cyclingsuk.org or write to Cyclopedia, Cycle, PO Box 313, Scarborough, YO12 6WZ. We regret that Cycle magazine cannot answer unpublished queries. But don't forget that Cycling UK operates a free-to-members advice line for personal injury claims, **TEL: 0330 107 1789**.



In TRL tests, cameras didn't make helmets fail injury threshold standards

Left: Robert Spanning. Top right: Patrick Field