

TECHNICAL/LEGAL/HEALTH
YOUR QUESTIONS
OUR ANSWERS

Q&A

MEET THE EXPERTS



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Photo: tacx.com

Riding on an indoor trainer should not in itself be a cause of cramp. But dehydration can be a contributory factor, as can overexertion

[HEALTH] Turbo trainer cramps

Q When winter drives me indoors, I keep myself fit by pedalling away on my home-trainer. I do an almost daily session consisting of a 45 minute period of increasing then decreasing difficulty, followed by 5 minutes rest and then a similar 30 minute period with a less demanding peak. My 77-year-old legs are then quite ready in the spring to bowl me along the road again – but it's bought at the

price of frequent, hideous thigh-cramps at night during the winter. How can I stop them occurring, and how can I relieve them when they happen?

BARRIE CROSS

A Leg cramps, due to sudden involuntary muscle contraction, are common. In most cases, the cause is not known although occasionally they may be due to one of several underlying conditions, including abnormal electrolyte levels in the blood

(you would usually have other symptoms as well) or a side-effect of medication (e.g. diuretics, Salbutamol and statins).

Stretching or massaging the affected muscle usually provides relief. For calf cramps, straighten the leg and pull up the toes. For cramps in the thigh, try hamstring or quadriceps stretching exercises depending on whether your cramps are at the back or the front of the thigh. Look online for exercises for the specific muscle group affected. Do them daily to try to prevent the cramps. In bed, stop your toes from pointing downwards by raising your feet up using a pillow (if lying on your back), or hanging the feet over the end of the bed (if on your front).

Most commonly used treatments for cramp lack scientific evidence to back them up. Quinine tablets are usually only advised for frequent severe night cramps disrupting sleep. Some people take extra salt or eat bananas on the basis that cramps are due to an electrolyte imbalance, but it is not clear that this makes any difference in most cases. Dehydration may contribute, so ensure you are well hydrated throughout a ride.

In many instances of exercise-induced cramp, overexertion and lack of muscle fitness is a factor. However, from the information you provide, this sounds unlikely to be your main problem, so check the set-up on both your home trainer

CONTACT
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EXPERTS

Send health and legal questions to the Editor (details on p86). We regret that Cycle magazine cannot answer unpublished health and legal queries. Technical and general enquiries, however, are a CTC membership service. Contact the CTC Information Office, tel: **0844 736 8450**, cycling@ctc.org.uk (general enquiries) or Chris Juden, technical@ctc.org.uk (technical enquiries). You can also write to: CTC, Parklands, Railton Road, Guildford, GU2 9JX. And don't forget that CTC operates a free-to-members advice line for personal injury claims, tel: 0844 736 8452.

[TECHNICAL]

Shimano front shifts

Q I know that the cable pulls on Shimano road and MTB 10-speed rear mechs are no longer the same, so you can no longer simply mix and match. But what about the cable pull on front mechs?

NICK RUSSELL

A Shimano's front indexing cable pulls have always differed between road and mountain. You've never been able to swap front mechs. I say never, but there used to be a trick you could pull by clamping the cable the wrong side of the bolt on some MTB front mechs – until Shimano changed the design.

Given road STI, you're stuck with a road mech. These mechs will shift smaller rings, but not a whole lot smaller and only if you can slide the mechs down the frame far enough. (This adjustment is often limited by too-high integral brackets, inopportunistically positioned bottle cage bosses and random tube shapes!)

Go too small with your outer and only the front of the mech can be the regulation 2mm from its teeth. Towards the rear of the cage the smaller ring curves sharply down and away from it, leaving a gap – perhaps big enough for the chain to jump through! I use a 46 outer with a Tiagra mech designed for 50, so four teeth smaller seems to be safe enough.

Then there's the outer-middle difference. This is vital to the functioning of a triple, since

it determines the proximity of the middle ring to the cage; and for reliable shifts, the middle ring must be as close up to the cage as it can be. How close is limited by the mech's deep inner cage.

The cage of the Tiagra mech pictured is designed for 11 teeth outer-middle difference, but here is working fine with a difference of only 10. I think the sharper curve of smaller rings helps me get away with less outer-middle difference than Mr Shimano intended. These are 46-36. One might not be so fortunate with 48-38. My inner is 24, by the way. Inners can generally be as small as will fit the chainset.

CHRIS JUDEN



and bike: they should match one another if possible. Make sure your saddle height and foot positioning on the pedal are correct. In cases of severe, recurrent or persistent cramp despite the above measures, see your GP.

DR MATT BROOKS

[TECHNICAL]

Legal lights

Q Could you inform me as to the legal requirements and the type of lights which cyclists are allowed to use on their bicycles? Any other relevant information would be welcome.

STEFAN BIELECKI

A Since flashing was legalised, you are now allowed to use almost any kind of light on a

Busch und Müller's DToplight Permanent is a rare example of an approved battery light, since it meets a corresponding EU safety standard (Germany's)



bike, provided you don't put a red one on the front or any other colour on the back, and provided it doesn't dazzle other road users. If it flashes, it must flash between 1-4 times per second.

Fitting what you're allowed to fit won't necessarily make your bike legal to ride in the dark. For that you need at least one front and one rear lamp that is *approved*. (You'll also need a red rear reflector and yellow pedal reflectors.)

A lamp is approved if it has a mark to say it conforms with BS6102 part 3, or the marking of another EC country, provided their approval system ensures a corresponding level of safety. There is only one other country of which that can confidently be said and it's Germany, where each approved design gets an individual approval >

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number prefixed by 'K'. The good news is that lots of lights have German approval. The bad news for battery-loving Brits is most of them are dynamo lamps.

It may surprise you to hear that it's also possible for a flashing lamp to be approved. And since BS6102 doesn't cater for flashing, these lamps get approval simply by claiming to emit at least 4 candela. They don't even need any official markings! Unfortunately, most flashers also have a steady mode and since the authorities like to apply a proper standard whenever they can, in that case they need to conform to BS. As far as I know, the only purely flashing light that can claim approval simply on the basis of being bright enough is the Reelight SL120.

Once upon a time, Britain and British Standards ruled the cycling world. Nowadays even the few, new British manufacturers of cycle lamps don't bother with BS approval for their products. Why should they? The lamps are perfectly legal to sell and to use; and so long as they shine okay, which mostly they do, the police will be happy. The only time anyone looks for approval marks is after an accident. What happens then, we don't know. You'll be riding illegally of course, but I would argue that such strict adherence to the law is no longer reasonable, now that approved battery lamps are like needles in haystacks!

The last time I checked, one large online retailer was selling 148 different bike lamps, only three of which were approved. But Cat-Eye no longer make those models so it'll probably be zero now. Note that the CE mark has nothing to do with a lamp's performance as a lamp and merely implies that it shouldn't poison, stab or electrocute you!

The good news is that the Dept for Transport is at last beginning to talk to us about the deregulation of cycle lighting. Until then, the easiest way to be legal is to fix a set of Reelight SL120 around your hubs, then fit whichever really useful (but unapproved) lights you like on the rest of your bike. Or fit a dynamo, where most of the lamps on the market are German-approved and excellent. However there are a



Like most lights, Exposure's Strada isn't 'approved', so it's legal only as an extra light

few battery lamps, adapted from dynamo lamp designs for use on racing bikes in Germany, that also have a K number – such as the Busch & Müller Ixon-IQ front and D-Toplight Permanent rear.

CHRIS JUDEN

[LEGAL]

Right of way on lanes

Q I do most of my cycling on narrow country lanes, where I am occasionally confronted by an oncoming, aggressively-driven vehicle taking up almost the whole width of the road. Would I be correct, legally, in maintaining that I do have the right of way in this situation? I am riding well over to my side of the road, whilst the other vehicle is well over the imaginary centre line onto my side.

PETER A MOIR

A In the UK, vulnerable road users, e.g. cyclists and pedestrians, are not afforded as much protection in comparison with several other EU countries such as France or the Netherlands, where there is strict liability. This means that if a motorist collides with a cyclist or pedestrian, they are obliged to compensate them for their injuries or loss. In the UK, any person who pursues a claim has the burden of proving both liability

(i.e. blame) and also the extent of their loss. CTC has campaigned for the UK to be brought into line with EU countries and for tougher sentences for bad drivers.

The Highway Code, which was updated on 22 October 2012, provides advice to motorists in relation to driving on country roads:

154: Take extra care on country roads and reduce your speed at approaches to bends, which can be sharper than they appear, and at junctions and turnings, which may be partially hidden. Be prepared for pedestrians, horse riders, cyclists, slow-moving farm vehicles or mud on the road surface. Make sure you can stop within the distance you can see to be clear...

This does not mean that motorists are obliged to stop for oncoming cyclists.

If it is safe to do so, it is sensible to take a primary riding position on the road. Always be cautious when approaching a tight bend. A motorist travelling in the opposite direction ought to either stop or slow their vehicle. If there space, you can then pass the oncoming vehicle. If there is no space to pass, then either the vehicle will have to reverse to a passing point or, if easier, you may need to retrace your path. There is no need to take refuge in the nearest hedgerow. Cyclists have as much right to the road as motorists.

PAUL KITSON

Beware blind bends on narrow country lanes, and listen out for drivers who may be ignoring the Highway Code – which advises them to 'Make sure you can stop within the distance you can see to be clear.'



Photo: iStockphoto.com