

Q & A

Your technical, legal, health and policy questions answered. **This issue:** black clothing, hub-gear turbo training, dogs on shared paths, and more

QUESTION OF THE MONTH



POLICY

NOT A BRIGHT IDEA?

Q There is a growing trend for cyclists wearing black clothing on our roads. This does not seem sensible to me. Yet when I looked on the CTC website (ctc.org.uk/commoncyclingquestions), I was astounded to read: 'There's not much evidence to support the argument that [hi viz] makes a significant impact on cyclists' safety.' Just because it was not possible to quantify, it does not mean that wearing brightly-coloured clothing should not be encouraged and black clothing discouraged.

DAVID WATSON

A If we knew of any studies suggesting that hi-viz (i.e. fluorescent/'day glow' material) makes cyclists any safer, we'd quote them. We can't, though, because we're not aware of any. In fact, our latest version of Ten Common Questions now cites three studies that couldn't detect any safety benefits.

Most importantly, we don't want anyone to be lulled into a false sense of security by hi-viz, especially as we know that cyclists have been injured and killed whilst

wearing it. On the other hand, research suggests that 'retroreflective' material, which light bounces off in the dark, *does* help catch drivers' eyes, particularly if it's in motion like ankle-bands on pedalling cyclists.

Another thing we're wary of doing is pandering to voices in the media and elsewhere that try to blame 'irresponsible cyclists' for their own deaths and injuries, regardless of the facts. This is why CTC's campaigning focuses on tackling the sources of road danger, namely speeding and bad driving, hostile road conditions, and lorries.

We're always on the lookout for new research on conspicuity, though, and await with interest the results of investigations into whether contrasting yourself with your background rather than wearing bright materials makes a difference – like kitting yourself out in black whilst cycling in the Arctic, by way of extreme example.

CTC doesn't condone irresponsible or illegal behaviour – and we're not discouraging hi-viz – but we do our best to ensure that what we say about cycle

MEET THE EXPERTS



RICHARD HALLETT

Cycle's Technical Editor



DR MATT BROOKS

Cycling GP



PAUL KITSON

Partner from Slater & Gordon Lawyers



CHERRY ALLAN

CTC Campaigns & Policy Information Coordinator

safety is informed by the best available evidence, however counterintuitive.

CHERRY ALLAN

TECHNICAL FIVE-SPEED TURBO TRAINING

Q Can a five-speed hub be mounted in a turbo trainer? The attachment of the gear cable on this bike enters the hub parallel to the chainstay, not axially as in some three-speeds.

Also, I want to repaint the frame of my Nigel Dean as some rust is now appearing after 30 years. Do you know of an affordable way of copying the Nigel Dean decals?

TIM WATERFIELD

A In answer to the first question: in principle, yes. You do not state the make of the five-speed hub but from the description all you will need are nuts that fit the jaws of the turbo trainer. They need some sort of cylindrical face shaped



● You don't have to have energy drinks during and after cycling. Ordinary tap water is fine

similarly to the head and nut of the quick-release skewer supplied with the trainer. If those that come with the hub won't fit, try Tacx Axle Nuts. They are made with a choice of 10mm or 3/8in thread.

There are several useful sources of old or replica decals, including H Lloyd Cycles of Penrith (hlloydcycles.com), who can supply decals for Reynolds tubesets. Search for 'Nigel Dean Classic decals' online and you will find a seller in France offering them on eBay for around £20 for the set.

RICHARD HALLETT

HEALTH DIABETES & ENERGY DRINKS

Q I've just had my annual blood tests done. The result was a slight impairment of glucose regulation. This did not show diabetes but could increase the risk in the future. This got me thinking about the energy drink I use (SIS Go Energy). Is this okay or should I consider changing? I don't go hard and fast on my rides, generally a steady 50 miles at around 12.5mph.

ALAN H TYLER

A Diabetes is a relatively common condition that results in raised blood sugar levels. Type 2 diabetes, which usually develops later in adulthood, is far more common than type 1 (which often appears in childhood).

Many people have blood sugar levels above the 'normal' range, but not high enough to be classified as diabetes. Several terms may be used for this by doctors. These include 'impaired fasting glycaemia', 'impaired glucose tolerance' and 'pre-diabetes'. These people are more likely to go on to develop diabetes over time. However, this risk can be reduced by eating a healthy diet, maintaining a sensible weight, and taking regular exercise.

Overall diet and lifestyle is more important than individual food items or drinks. A diet which is high in fruit and vegetables and lower in sugars, fat and salt is (as usual) best. It is generally

recommended to eat some starchy carbohydrates at each meal, such as pasta, rice and grainy breads as these release energy over a more prolonged period.

In terms of what to drink during and after cycling, water is perfectly adequate, especially for shorter rides. If you are cycling for more than an hour and would prefer to take a 'sports drink', you could save some money by making your own using cordial, water and a pinch of salt. There's no need to use any particular brand.

DR MATT BROOKS

TECHNICAL NARROW-WIDE CHAINRING

Q On page 20 of the Oct/Nov issue, reference is made to mountain bike gearing 'with a narrow-wide chainring'. I have not come across this phrase before. Can you explain?

JOHN PEGG

A The term 'narrow-wide' refers to the width of the chainring teeth, which are made alternately narrow and, er, wider. It's designed to retain the chain on a single-chainring bike without recourse to a chain guide mounted at the bottom bracket or seat-tube.

The idea is that the wider teeth fit between the chain's outer plates and the narrower teeth between the more closely-spaced inner ones in order to lessen or obviate the likelihood of chain derailment when the chain is flapping around on bumpy terrain. Many users affirm that this is indeed the case, indicating that the concept has practical merit. The chainring must, of course, have an even number of teeth.

RICHARD HALLETT



● It's easy to see why this RaceFace narrow-wide chainring is so called



AQUA REPEL Jacket



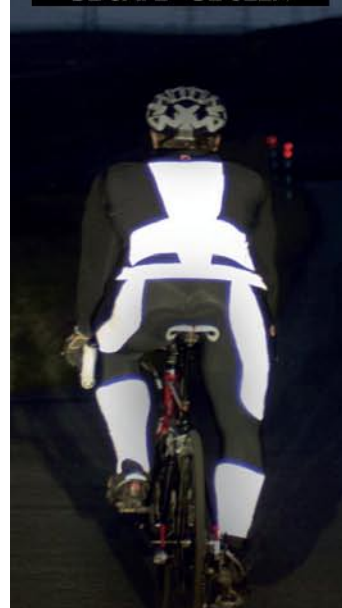
- Thermal
- Windproof
- Breathable
- Water Repellent

£129



PROBING THE WORLD'S TOUGHEST SPORT
ProCycling
In short, this beats the Gabba2

NITELIFE BE SAFE - BE SEEN



Thermal Bibtight **£79.99**



Lusso

www.lusso.bike

0161 724 5222

● Shaft drives are less efficient than chain drives but do exist



Photo: dynamicbicyclesuk.co.uk

» **TECHNICAL
SHAFT DRIVE**

Q Are there any shaft-drive bicycles on the market today? I know several types were developed and sold in the 1890s and 1900s.

JOHN MARTER

A Shaft-drive bicycles live! There are several makes on the market, all of which use the basic layout of a bevel gear that turns drive through 90 degrees at each end of a drive shaft. Claims by manufacturers that such drives can match the efficiency of a chain are implausible, since each set of bevel gears absorbs a significant amount of power. The advantages of low maintenance and cleanliness are, for most applications, outweighed by considerations of power loss, weight and complexity. They also hinder rear wheel removal and require the use of hub or singlespeed gearing, but in some purely utilitarian applications they work well.

RICHARD HALLETT

**LEGAL
DOGS ON SHARED PATHS**

Q What is the law regarding dogs on shared-use cycle/footpaths in the UK?

REG CAVE

A Where there are cyclists sharing cycle/footpaths in the vicinity of dog walkers, it is in my view highly advisable for dogs to be kept on short leads. Recently, cyclist Anthony Steele was awarded £65,000

compensation after he suffered injuries when he became entangled in a long extendable lead. He noticed a group of people standing in the middle of the path, so he rang his bell to warn them of his approach. As he cycled to the left of them, one of the pedestrians' dogs darted out in front of him, causing his bike to get caught in the retractable lead.

However, there is no legal requirement for a dog to be kept on a lead on a public right of way. A local authority can make an order under Section 27 of the Road Traffic Act 1988 that dogs are kept on leads on certain paths.

Livestock are afforded legal protection under Section 1 of the Dogs (Protection of Livestock) Act 1953. Humans are afforded legal protection under the Animals Act 1971. Section 2 (2) of the Act provides, 'Where damage is caused by an animal which does not belong to a dangerous species, a keeper of the animal is liable for the damage, except as otherwise provided by this act, if –

(a) The damage is of a kind which the animal, unless restrained, was likely to cause or which if caused by the animal, was likely to be severe; and

(b) The likelihood of the damage or of its being severe was due to characteristics of the animal which are not normally found in animals of the same species or are not normally so found except at particular times or in particular circumstances; and

(c) Those characteristics were known to the keeper or were at any time known to a person who at that time had charge of the animal as that keeper's servant or, where the keeper is the head of the household, were known to another keeper of the animal who is a member of that household and under the age of 16.'

This is a poorly drafted piece of legislation. To establish liability, each of the three criteria set out above must be considered in turn. Liability will only be



● Arguably, dogs ought to be on short leads on paths shared with cyclists but there is no legal requirement

imposed on the keeper of the animal if each of the requirements is satisfied.

Under the Dangerous Dogs Act 1991 (Section 3), it is a criminal offence (for the owner and/or the person in charge) to allow a dog to be 'dangerously out of control' in a public place or a place where it is not permitted to be. A 'dangerously out of control' dog can be defined as a dog that has injured someone or a dog that a person has grounds or reasonable apprehension that it may do so.

PAUL KITSON

**TECHNICAL
BETTER BRAKING**

Q I have a Batribike 20 tricycle but am struggling to apply the rear brake effectively due to tenosynovitis in my left hand. This rarely causes trouble, except that I now live halfway up a steep hill and need to brake my trike fairly forcibly. In the last month, I have ridden the trike a lot in Holland where I had no trouble at all. Have you any helpful ideas?

SHELLEY LONGHURST

A The Batribike appears to have a V-brake on the front wheel and a drum on one of the two rear wheels. While it would be fairly easy to add a brake to the third wheel, it is not obvious that this would increase braking power – and hence reduce the force required at the lever – since at least one hand would have to operate two brakes. One option worth considering would be to have a second brake on the front wheel, which is a legal option on a tricycle. Cantilever brake bosses could be brazed to the back of the fork blades and a second V-brake installed, doubling the braking on the front wheel, which is in any case more effective at applying braking force to the road.

RICHARD HALLETT



● A road-legal Pashley trike with its two brakes on the front wheel

Contact the experts Email your technical, health, legal or policy questions to editor@ctc.org.uk or write to **CTC Q&A, PO Box 313, Scarborough, YO12 6WZ**. We regret that Cycle magazine cannot answer unpublished queries. But don't forget that CTC operates a free-to-members advice line for personal injury claims, **tel: 0844 736 8452**.