



Left: Getty Images

Health

Breathing uneasily

Q I will be 80 in a few weeks' time. Following chest and breathing problems and a visit to A&E, I have been diagnosed with bronchiectasis.

I will be attending a chest clinic for advice but would appreciate information about this condition

Martin Watts

A Bronchiectasis is a long-term respiratory condition that causes scarring and inflammation of the lungs. It results in coughing, breathlessness and reduced lung capacity, and may feature recurrent chest infections. More information can be found here: [nhs.uk/conditions/bronchiectasis/](https://www.nhs.uk/conditions/bronchiectasis/). You may be offered inhalers, antibiotics and physiotherapy to help you manage the condition.

You will be pleased to hear that exercise, and especially cycling, has been shown to improve lung function and improve all-round fitness in sufferers. Don't be afraid of getting breathless when cycling: it won't harm you as long as you take things steadily. Bear in mind, however, that extremes of heat and cold and air pollution will affect you more due to your reduced lung function. On those days stay indoors and use a static bike. You may also find an e-bike makes it easier to keep up with your cycling companions.

Dr Kate Brodie



Technical

In charge on tour

Q I'm a multi-day camping tourist who is looking to buy a rim/sidewall dynamo to charge my Garmin and phone. I don't ride at night so lighting isn't a requirement. I would be grateful if you could suggest some cheap(ish) dependable generators.

Ian Coy

A The PedalCell Rim Dynamo (cyclinguk.org/pedalcell) meets your requirements but does not appear to be currently available, while Velogical's lightweight offering (June/July 2018) is even more expensive and needs to run at 30km/h or more to produce the power needed to charge your devices. Bottle dynamos driven by the tyre sidewall and generating the usual 6V/3W output are available online for under a tenner, but they are noisy and inconsistent.

I strongly recommend having a wheel built around a dynamo hub for device-charging purposes – Shimano dynamo hubs are available from around £60 (DH-3N31-QR model, for example, although the DH-3N72 is pictured) and they work well. You'll also need a USB dynamo charger such as the Cycle2Charge V3 (cycle2charge.de) to turn the dynamo output into the 5V required by your devices and to provide a USB port.

Richard Hallett

Technical

Lower gears with GRX

Q My Genesis Croix de Fer has a Shimano GRX 11-speed mechanical groupset with a 46-30 chainset and 11-34 cassette. Living in a hilly part of Devon and no longer being a powerhouse rider, I am looking to lower my gearing. The advice I'm getting is that lower gearing is not an option due to 'clearance issues'. I would appreciate your advice please.

Patrick Jeffery

A Your chainset and cassette are the GRX 2x11 standard and work with the short-cage RD-RX810 rear mech. You should be able to substitute the RD-RX812 long-cage rear mech, which will handle an 11-42 cassette. This will need a longer chain and careful use of gears to avoid chain slack in some combinations.

Richard Hallett



Technical

Torque talk

Q I'm building a new bike. It'll have a few carbon bits (steerer, handlebar, seatpost), which means I need to be careful not to over tighten crucial bolts. I understand that the tension in a bolt will differ for the same torque setting depending on whether the threads are dry or have grease, anti-seize (or even threadlock) applied. Most manufacturers give a torque setting but generally don't say how the threads should be treated (or not).

Tim Rusbridge

A A 'dry' thread – one assembled without lubrication – will require a greater tightening torque to achieve the same clamping force, due primarily to friction between the mating surfaces. Small threads in soft materials may even fail during tightening through damage to the thread surfaces, so it is usual to lubricate them with oil or grease. Component manufacturers specify tightening torques with this in mind and, in my experience, usually state that threads should be lubricated before assembly.

Richard Hallett



Get in touch

EMAIL your technical, health, or legal questions to editor@cyclinguk.org or write to Cyclopeda, Cycle, Cycling UK, Parklands, Railton Road, Guildford, GU2 9JX. 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**.