



## **CYCLING SAFETY, TRAINING TIPS & EQUIPMENT GUIDE**

Enjoy the Ride - Whatever your cycling ability we want you to enjoy the cycling. The more you prepare for the ride by regular training the easier you will find it. The amount and type of training you need to do obviously depends on your current degree of fitness and cycling ability.

The distance will not seem a very long way if you are fit and used to cycling: but is likely to be difficult if you are new to the sport even if you are otherwise very fit indeed. Bear in mind, too, that it is almost certainly easier to cycle a given distance at 12-15 mph than at 7mph simply because you are in the saddle less – but you must be fit enough to maintain the higher average speed.

It is also easier to ride in a group sharing the lead than it is to ride solo – on a calm day (how often do we get one of those?) the wind resistance accounts for about 30% of your effort. But again you need to know how to ride with others, which requires some technique. It is worth gaining this skill if you can by riding in a group, beforehand.

If you will be following a route guide and map you will find it helpful to have a map pocket, handlebar map holder or similar to keep the instructions easily accessible.

If your route is almost entirely on-road, a Mountain Bike (ATB) is not ideal and 'knobbly' off road tyres would be a real handicap - like riding with your brakes on. If you need to use an ATB, fit slick or touring road tyres.

Bike shops can give your cycle a thorough service for a fraction of what a motorist has to pay. The mechanic will probably then be pleased to advise on setting the bike up properly to fit you. These two steps plus keeping the tyres pumped hard will pay dividends when you undertake a long distance.

Here are some other general hints and tips – forgive us if we are stating the obvious but hopefully you will find something helpful. We have created it from a variety of sources, adding some of our own thoughts - see credits at the end.

Above all remember that the best approach for you will be personal but to know what it is you have to try a variety of recommendations and find out what suits you. The morning of a ride is not the time to find out!

We begin with the tried and tested basic rules which are easily overlooked:

### **Rules for Cyclists – by *Vélocio***

1. Keep your stops short and few
2. Eat before you're hungry, drink before you're thirsty
3. Never get too tired to eat or sleep
4. Add a layer before you're cold, take one off before you're hot
5. Lay off wine, meat and tobacco while on tour
6. Ride within yourself, especially in the first hour
7. Never show off

Paul de Vivie 1853-1930

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## TRAINING AND FITNESS

1. **If you have not cycled for some time** - Start off with a couple of 20-30 minute rides per week. After two weeks add a third ride of about 45 minutes. After four weeks the two shorter rides should not be less than 30 minutes and the third should be about an hour.
2. **Regular weekly cycling** - Once you feel reasonably fit, we strongly recommend that you try to fit in as much training as possible on a regular basis. Hard riding one day followed by a recovery day is a good basic approach.
3. **Longer Rides** - As your training programme gets closer to the day of the ride, plan a number of longer rides of, say, four hours duration (more if time permits). On long distance rides, without training, it is normal to experience muscle fatigue, cramps and stiffness in the legs, shoulders, forearms, neck, wrists and buttocks but a regular weekly programme between now and the event will minimise if not eliminate these aches.
4. **Hill work** - Try to find long moderately steep hills to practice on. Remember it is better to find longer hills than short really steep ones - but hill work is essential in your weekly cycling programme - in fact once you start to conquer hills you will enjoy their challenge and the inevitable downhill reward.
5. **Indoor training** - A regular routine of press-ups or pull-ups, sit-ups and leg raises, the use of an indoor cycling machine and a step machine is strongly recommended. Do sufficient exercise to make you breathe hard - again most benefit comes from the frequency of training as compared to one long session.
6. **Using a gym** - This is very strongly recommended and can be substituted for the shorter rides - the instructors can tailor make special programmes for you and will also give you excellent advice on the importance of "warm up" exercises and "stretching" as well as diet.
7. **Warm up before a ride** - Shoulder rolls, arm rotations and jogging on the spot for 6/7 minutes before a ride help to increase the blood flow through your body - this elevates body temperature, circulation and generally prepares the body for exertion.
8. **Stretching after a ride** - Muscle soreness and stiffness is relieved by "warming down" and a good routine of "stretching exercises" should be carried out during cycling stops, lunch stops and after the ride - each stretching position should be held for about 15 seconds. It really is worth your while to make contact with a gym or aerobics teacher to ensure that the stretching exercises are right for you.

## USING THE BIKE

9. **Changing gears** - Get used to using your gears - they are there to help make cycling easier - on all down hill sections use the big chain ring as not only is it safer to do so but it also helps stop the chain from coming off. Use the small gear for going up hills as this helps to keep your momentum and leg revs up.

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10. **Skilled cyclists usually stay in lower gears** than novices – spinning the pedals rapidly may not come naturally to you but makes more efficient use of your muscle power. Keep your legs spinning without hurting them - 70-80 revs a minute or more, professionals might reach over 100 rpm. (“Pedalling faster means that your legs build up less lactic acid and make you much more fluid on the bike. This means that you waste less energy. When you pedal faster you also use less carbs and energy stores and rely more on oxygen (which is slightly easier to get!” – *from the Cycling Plus website*).
11. **Try to maintain a regular ‘cadence’** (revolutions of the pedals per minute) as the conditions and terrain change – use your gears to do this.
12. **Brakes** - ALWAYS APPLY THE BACK BRAKE FIRST. Whenever using a bike for the first time, you must become thoroughly familiar with which lever operates the rear and front brakes.
13. **Saddle height** - It is extremely important that the saddle is set at a correct height to allow your legs to rotate easily. This means that when the pedal is in the down position your leg is fully extended and when the pedal is in the up position your knees are not getting close to your chin or chest.
14. **Male and female anatomies** are different and there are appropriate saddles for each - make sure you have the correct one.
15. **Puncture outfits** - we know that many cyclists have never ever mended a blowout - but always have a kit and pump with you. If you do not have quick release wheels bring a suitable spanner. A spare tube is also a must on a long ride. Ask for advice at your local bike shop. (Other cyclists will often share their know how or help fix a puncture but you should have the necessary spares with you.)
16. **Toe clips** - these do help your cycling performance but they take a little getting used to. They allow you to use your muscles on the ‘up’ as well as the ‘down’ stroke of the pedal and even-out the effort. (Clip-less pedals are even more efficient but require matching shoes and take more getting used to.)
17. **Handlebar extensions/bar-ends** (if you have a mountain bike) - these help against finger and wrist cramp and also for steep uphill climbs. Suspension however is not advised for on-road use because it absorbs energy, needlessly on the better surfaces

#### OTHER KIT

18. **Water bottles** - A water bottle on your bike whilst training is essential. Water is essential to stop dehydration and essential to help use carbohydrates. *Drink before you are thirsty* is a good tip. A sensible target is to drink about 300ml early in the ride then between 100ml and 200ml every 20 minutes.
19. **Cycle computers** – are helpful to keep you informed of progress and your pace. Try to check your ‘computer’ against a known distance on the ground before relying on it – they can be uncannily accurate but must be set up correctly. Ensure there is an average speed function; this will be a good spur to your performance. (To protect it against wet weather, wrap it in a few layers of cling film!)

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20. **Tyres** - Always check your tyre pressure. The tyres should be hard to reduce the risk of punctures and again the harder the tyre the less of its surface is on the road and therefore cycling is easier. A 'Track Pump' with a pressure gauge will soon pay for itself in saved energy and fewer punctures. Tyres should have a recommended pressure printed on them.
21. **Helmets** are not legally required for cycling in the UK, but if you wear one please ensure it is an approved design. Wear nothing under it (except perhaps a baseball cap or sweat band) and replace it after it has undergone any shock, as this will reduce its performance.
22. **Cycling shorts** - Padded cycling shorts are best - they help to absorb vibration and probably more important they will help you "mould" to the contours of the saddle. NB. Do NOT wear your ordinary underwear beneath your cycling shorts, that defeats the object (and get a suitable cream to rub into them to keep them supple).
23. **Cycling shoes** - Thin, hard-soled shoes are best. Trainers are not advisable because their cushioning absorbs pedal power - whatever shoes you wear make sure you have no loose laces that could get tangled up in the spokes.
24. **Cycling gloves/mitts** - Get a good padded glove/mitt - they help to absorb shock and can stop abrasions if you fall off. They also help to reduce the "tensions" created by possibly gripping the handlebars too tightly.
25. **Cycling vests** – ensure you wear a suitable cycling/sports shirt or vest which will keep your skin dry by 'wicking' perspiration away. Cotton garments such as tee shirts will become damp and clammy against your skin after a while and in rain will even promote hypothermia, if they get saturated.
26. **Sunglasses** - Not only do they stop the glare but also of equal importance they guard against dust and stones that can get thrown up from passing vehicles. Alternatively a hat with a good peak will reduce glare and protect your head from sunburn.
27. **Wet gear** - is necessary at any time of year. A lightweight jacket certainly, over-trousers perhaps not essential other than in the depths of winter. Again ensure they are breathable fabrics such as Gore-Tex. If you don't take it with you – it will (almost certainly) rain... And please don't trust the weather forecast too much; remember than conditions can vary a lot in a short distance and a few minutes – the Met Office cannot predict everything.
28. **Socks** - Short, thin, light socks are most comfortable.
29. **Headbands** – These really are useful as they stop the sweat from going into your eyes

#### FOOD AND DRINK

30. **Water** - It really is important to drink sufficient liquids. You should fill your bottle at each water stop. However, sweet, 'fizzy' drinks are not advised, the large amount of refined sugar they contain could cause you to feel very tired as they are too concentrated and draw water from elsewhere in the body to help you digest them.

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31. **Just being dehydrated** will make you feel tired – to repeat the earlier points. *Drink before you are thirsty* is a good tip. A sensible target is to drink about 300ml (half a pint) early in the ride then between 100ml and 200ml every 20 minutes.
32. There are now on the market a number of different brands of **energy products**, which also are of great help though they can be expensive. Raisins and bananas are also good to help you to keep going.. A combination of **bananas and water** can be as efficient as energy drinks however.
33. If you follow a reasonably balanced diet with sufficient carbohydrate and protein there is no need to worry unduly about special foods the day before a ride. This is in any case very much a matter of personal needs and preferences. On the day of a ride, David Millar has a breakfast of cereal, milk, fruit and yoghurt then carries a *musette* bag with jam sandwiches, little cakes and energy bars.
34. However, after exercise it is important to **replace carbohydrate in liquid form** – about 1gram of carb. per kg of bodyweight i.e. an 80kg person would put 80g into a pint of water and drink it down immediately they get to the end of the ride, or at most within 20 minutes. Products to consider are: Go Electrolyte, High Five Energy Source, Maxim Electrolyte or Cytomax.

### CYCLE SAFELY

**Cycling on public roads** is a potentially hazardous activity and riders must follow traffic law and obey the Highway Code. The ride is NOT a race.

You should ensure that both you and any in your group are in reasonable health and sufficiently fit for the distance and conditions: consult a GP if in doubt.

The organisers, the Charity/ies and Cycling Support Services Ltd, cannot be held responsible for any personal injury, accident, loss, and damage or public liability. You will ride at your own risk – please advise your companions of this.

### SOURCES

1. Norwood Challenges website
2. CTC magazine 'Cycle' August 2004 – 'Health' by Joe Beer
3. Cycling Plus website
4. Cycling Plus Q&A June 2004

**HAPPY CYCLING!**