

## BRATHAY CYCLING – TRAINING TIPS

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## **BEFORE – GOING FURTHER**

### **Set your goal**

First off, choose your event. Be realistic: if you took up cycling only a couple of months ago, don't enter a monster slog through the French Alps. Challenging, yes; sensible, no.

Then think about exactly what you want to achieve on your ride. Are you completing, competing or conquering? Again, be reasonable. Set an impossible aim and you'll soon lose motivation.

### **Get long rides in**

We all miss occasional planned rides, but even if you can't do high mileage outings all the time, don't miss the long rides at the heart of your training – they're vital. Bad weather? Go out anyway; you could get bad weather on event day.

### **Develop technique**

Get used to incorporating technique work into your general rides, as well as devoting regular sessions to improving your skills. Find a long, winding hill and time yourself down it over several runs, looking to get quicker by laying off the brakes, leaning into the corners and learning when to put the power back on.

Be careful – do this with a riding mate and only on quiet roads where you can easily see any approaching traffic. And don't think that you can make up for poor climbing by flying downhill.

Sheltering from the wind in a group saves you masses of power output from your legs and will improve your sportive finishing time, but it doesn't necessarily come easily – there are tactics to learn here too, so practise in regular group rides and local road races.

The bottom line is, the more comfortable you are riding in close formation, the more time you can save.

### **Muscle power**

Lactic acid is produced when your body breaks down carbohydrate for fuel, resulting in lactate in your blood that affects your muscle performance.

All you really need to know is that the point at which lactate starts to accumulate faster than you can disperse it is your lactate threshold (LT), and raising it helps you ride faster for longer.

Working on your power is important too, both for increasing the amount of force you can put into every pedal stroke and also for increasing endurance.

### **Take breaks**

You don't get fitter when you're riding, you get fitter when you recover afterwards, which is why you need to have at least one day without exercise every week, or more if you over-stretch yourself, plus an easy week each month.

## **Drink enough**

You might have read that you should drink 500-1000ml of fluid an hour while riding, but that's only a rough guide. Work out precisely what you need at varying intensities and in different weather conditions by following this process over several rides:

Weigh yourself, before putting on your cycle kit. As an example, suppose that it's 75kg.

On your return, note the amount you drank and ate during your ride. We'll say it was 1500ml, which weighs 1.5kg, and three gels of 0.06kg each, so you've taken a total of 1.68kg on board.

Before showering, eating or drinking, weigh yourself again. We'll say it's now 73.2kg.

Subtract the second weight from the first to get your bodyweight change:  $75 - 73.2 = 1.8\text{kg}$ .

Add the weight of the food to this to get your total loss:  $1.8 + 1.68 = 3.48\text{kg}$ .

Divide total losses by the hours spent riding:  $3.48 \div 3\text{hrs} = 1.16\text{kg}$  lost per hour

You won't get to the end of your training ride or event at the same weight as you started, but eat and drink enough to be within 1-2kg. Never be more than 2-3 percent down in mass unless it's a ride where you really can't get adequate fuel down.

## **Become fuel efficient**

You need to drink when you ride to replace the water you sweat and breathe out, but for longer training rides and during the event itself you must use drinks to help provide fuel. Suffering 'bonk' – when your body can't get the energy it needs and refuses to cooperate any further – is very bad news.

For both training and the big ride, try a drink that's 5-7 per cent carbohydrate. This is an isotonic level, meaning the drink contains the same concentration of dissolved particles as your body fluids, so will be absorbed fast. Some people prefer a hypotonic drink – one with a carb level of less than 5 per cent. The only way to find out what's right for you is by experimenting in training. Choose a drink that also contains electrolytes, particularly sodium. This speeds up the delivery of fluid to your body, so it's especially important on longer rides.

Finally, it's key to go for a drink that you really enjoy the taste of – that way you're far more likely to drink enough. Drink plenty before you go out on your bike so that you start off fully hydrated, and continue drinking afterwards – a little and often – to aid recovery. If you've trained for over an hour, make it a carb drink. Don't wait until you feel really thirsty – that's a bad gauge of need.

You should consume at least 1g of carbohydrate per kilogram of bodyweight for every hour of riding. This can be in the form of carb-electrolyte drinks, gels, bars, solid food, or a mix of these. But your needs could be different from the norm so it's important to experiment in training. That way you'll be able to tell exactly what you can tolerate and what you need with you on the day. If riding an event, find out what food and drink will be available and at what points along the route.

If you can't stomach the energy drink on offer, take your own sachets. If you get sick of sweet stuff, check there'll be something savoury for you to grab, or carry it with you.

### **Avoid injury**

When you step up the amount of riding you do you'll be adding stresses and strains on your body. You might be tempted to ignore niggles in order to stick with the programme. Don't! Riding through the pain is a great way to make minor problems major.

If you get injured, take it seriously. Take some time off the bike or do some cross-training, and if it's a biomechanical problem have your riding position looked at by an expert. If necessary, visit a health professional. Whatever you do, don't ignore a potential injury when it's still in the niggles stage.

### **Pace yourself**

Pacing is crucial in training and on the big day. The main trick is to climb at an intensity that won't blow your legs. This comes with experience, but if you've trained by heart rate (HR) or power you should have a good idea of what you can sustain.

If you don't know how hard you should be working, don't go over 85 per cent of your max HR on even the steepest hills or you'll dip too far into your glycogen stores. You have limited glycogen and can never eat enough to make up for going too hard too soon. Pace yourself, feed regularly and enjoy the ride.

## **BEFORE – NUTRITION**

### **Carb-loading before a sportive**

In the week leading up to your sportive, it's important to taper – doing less volume in your training – in order to reach the event rested and ready to ride, but you'll need to think about your food intake as you approach the big day too. This has traditionally meant eating plenty of carbs in the last few days in order to fill muscles with glycogen in advance of the ride.

Carb-loading seems like a very old term now, but it's still true that if you can build up your stored carbohydrate in your body – the glycogen stores – it will last you longer when you get into events.

Finding out how much you'll need is pretty simple too. That's where you would use grams per kilogram of body mass because it's very much determinant on your lean muscle mass and how much you're going to be able to store in your body.

Generally somewhere between 8g and 12g for most recreational riders, but it's a little bit dependent on experience and what riders are looking to achieve out of their event – whether they're just getting round or going for a PB.

10g would basically mean three carbohydrate-based meals in the day with carb snacks in between. A lot of people struggle with taking in a lot of food bulk when they're not really doing the exercise while tapering. It seems unnatural and you feel a bit sluggish if you're just loading up on food all the time, so you can use the carbohydrate drinks.

### **What to have for pre-ride breakfast**

You're rested and full of carbs in the 48-hours before your sportive – don't spoil your prep by foregoing breakfast before the event.

For breakfast on the morning of the big ride – two or three hours beforehand – we normally talk about up to 2g per kg of body mass. Basically, that's two sets of breakfast – porridge with toast as well – doubling up what we'd perceive as a normal breakfast serving. You could use energy drink along with a large serving of cereal or porridge if you didn't want to eat quite as much.

As the nerves build in the lead-up to the event, there's sometimes a tendency to feel like you've not got enough energy in the bank and the temptation to slurp down a gel can easily become overwhelming. Hold this desire in check – the resulting sugar rush and insulin response will do you no favours until you're working hard on the bike. If you've carb-loaded properly, there's no need to take gels beforehand.

## **DURING - PACING**

### **Start slow, finish strong**

There's always a sense of urgency as your event gets underway. Hundreds or even thousands of riders get out onto the roads in large groups and unless you keep your wits about you, it'll be too late before you realise you're working well above your intended pace or heart rate – digging a hole before the going really gets tough.

When there's a long day ahead, warming up properly is really important. Focus on keeping the intensity low for the first few miles and avoid competitive instincts on the day's first climbs. Once you've settled into your rhythm, you can decide whether or not you feel like pushing on a little harder.

### **Check your data**

Even if you've not managed to complete the distance of your next sportive in training, it's well worth looking at data from previous rides to inform your expectations on race day. If you've got a GPS cycling computer, look back through training rides building up to your event, focusing on distance covered, elevation climbed and average speed.

If you've been unable to break an average speed of 14mph, for example, over a shorter course with less climbing than you'll have to take on during your big event, there's little point in setting your sights on averaging 18mph on the day. Be realistic in your expectations and mindful of the terrain you'll be encountering. Remember that wind and weather conditions can affect any estimation too.

### **Know the route**

Take the time to really study all the event information on offer. Knowing when taxing climbs are coming up can help you prepare for them, whether that's means reducing effort leading up to them or taking food a bit early to avoid missing a feed while spinning up a mountain.

Taping a route profile to your stem or better still, uploading the event route to your Garmin so you can view a real-time profile, can make a massive difference to preparing for climbs and pacing your efforts.

### **Listen to your body**

Becoming attuned to your body's feedback while riding is crucial to pacing – you don't want to wait until your body is battering you with bone-deep fatigue or cramp before taking action.

The thump of your heart in your throat; stinging of lactic in the legs; ease of breathing; back muscles that need a stretch; a slight thirst; a craving for salt – all these things and more can help inform your effort levels and nutrition minute to minute. As you ride, ask yourself how you're feeling right now and question whether you're working at the right intensity to make it to the finish strong.

A 1 to 10 scale of perceived rate of exertion can be a great way to simplify this – try to avoid sitting above six out of 10 in terms of effort to save something in the tank for later.

## **Pacing by heart rate**

If listening to your body yields only static, it's not too late to incorporate a heart rate strap for event-day pacing – even if you've not been training by heart rate zones.

Completing a 30-minute maximal effort test on a trainer, then taking your average heart rate for the last 20 minutes will give you a good approximation of your lactate threshold heart rate. This is the point at which the muscles are creating lactic acid that it can't shift. Staying below this heart rate for the majority of the ride can help to avoid going too far into the red.

## **Avoid surging**

Most sportive riders don't need to cover attacks or break away from a group, so think about managing effort steadily – conserving on the hills, recovering on descents and avoiding sudden spikes in effort. Imagining the whole race as a time trial can help focus attention onto yourself rather than being provoked by those around you.

## **Pacing technique and equipment**

If you want to be strong all day, staying in the saddle and spinning is the way to go. You'll put less stress on your legs by keeping the cadence high and also avoid recruiting the large muscle groups that engage when climbing out the saddle.

To facilitate this, gear selection is really important. A cassette with a 28t sprocket on the back is a must-have for most sportives, along with either a 34t or 36t small chainring at the front – depending on how strong you are. If you're fairly new to cycling, check your bike's not sporting a 39t front and 23t rear or you may find you're walking more than riding during your event.

## **Ride in a group**

Aside from the mental boost of riding with others, working within a group of a similar ability will mean you're regularly shielded from the wind, helping you to recover as well as giving a speed boost.

Of course, it's important not to try and hold the coattails of a group that's too fast. If you find yourself in a situation where you're working too hard, ease back to a comfortable pace and wait for another group – or go it alone and regroup at the next aid station.

## **Mental pacing**

As well as thinking about how your legs are going to cope hours into a long day, putting some time into a mental strategy can stop your mind from being detrimental to your performance as the miles wear on.

Breaking the event down into smaller chunks is a great way to do this. Whether it's 15-mile sections, to the next aid station or the distance to the local shops and back, completing several shorter rides rather than a single massive one is easier to get your head around.

## **DURING – NUTRITION**

### **Fuel quickly, then hit your carb goals**

Once your nervous energy is released by rolling out of the starting gate with hundreds of other enthusiastic riders, nutrition is just one of the many things you need to concentrate on, but keeping fuel in mind is key to success.

One of the big mistakes people make is to hold off on the energy drinks and gels a bit too late. Generally, even with your maximum loading, you probably only have enough glycogen stores to last you for about 90 minutes, but you certainly don't want to be waiting until you're getting close to that point. The longer you can preserve your own glycogen stores, the better you tend to feel.

You want to get into your ride and settled into your rhythm, but generally, take a gel or bar within 30-40 minutes and keep that regular feeding going as you go along, so that you're hitting about 60g of carbs per hour. That often means one or two isotonic gels per hour plus what you're drinking. Some electrolyte drinks take care of carbohydrate and electrolyte together.

### **Stick to sports nutrition**

Sports nutrition products are designed to just give you the elements of the food that you need in quickly absorbable form – that's the whole rationale for them. So of course you can eat a jam sandwich or whatever it might be as you go around, but you'll also have some fibre and some fats combined in there as well that are all going to slow down the absorption.

Many people find relying solely on sports nutrition tricky, with plenty of riders using real food alongside their sport-specific products. It's all a balancing act between performance and your ability to deal with the palatability of sports nutrition.

If you're really pushing hard and going up the intensity levels, you're going to struggle to have the readily available energy need there if you don't use sports nutrition and only go for real food. That's the trade-off.

### **Keep your head at feed stations**

Sportive feed stations offer a wealth of leg sustaining treats, but they can also tempt you into scoffing food that'll just sit heavy in your stomach for much of the ride. Sticking to sports nutrition and avoiding temptation at feed stations can keep your guts and muscles happy even if your taste buds aren't always satisfied.

Sportive riders have to be wary of getting to a feed station and eating too much because invariably there are sports nutrition products, but also cakes and sandwiches as well. There's always a temptation to overdo it at that point and then you're going up a climb within five to 10 minutes and you're regretting the sandwiches and jaffa cakes you've just eaten. If you put food into your stomach, it will be pulling some blood supply to help with digestion away from the working muscles. If you do overeat then you're either going to end up robbing your muscles of some of the oxygen they need to do the exercise or you'll end up with cramps in your stomach because you're struggling to digest it.



### **Know your gel ingredients**

Variation between different brands' gels can easily lead to nutrition mistakes. The variations in concentration of carbohydrates are absolutely enormous. Some products are so concentrated that if you don't take enough water with them, it's undoubtedly going to cause you gut problems.

It's basically drinking sugar syrup and not diluting it in your stomach, so it will just sit in your gut, won't be absorbed and your body will try and pull fluid out of your cells to try to dilute it, so it's the complete opposite to what you want. It comes down to choosing the right product for the right job.

### **Save caffeine for when you're flagging**

As the ride drags on, the legs and mind invariably suffer, but having a bit of caffeine can really help freshen you up on the way to the finish.

If you're riding for over four or five hours, caffeine is something you definitely want to look at to avoid that fatigue element. Caffeine is purely there to trick your brain into thinking you're not as tired as you actually are.

Obviously, the more caffeine you have day-to-day then the less of a boost you'll receive from necking a caffeine gel, but there are other things you can do to freshen your palate. Try packing several flavours gel to rotate through, rather than getting sick of just one.

## **AFTER - RECOVERY**

### **Resting and fitness gain**

The main principle to keep at the forefront of your mind is that training hours allow for the possibility of increased fitness levels, but improvement only occurs with proper recovery. Therefore, the process of getting fit happens when you're resting and adapting to the training – not when you are actually training. This is extremely important. Often coaches, frequently have problems with highly-motivated athletes who struggle with the idea of 'sacrificing' training time for high-quality recovery. Therefore, there will be times when putting your feet up and taking a nap will bring more fitness than another hard training session, which might lead to just more fatigue and loss of form.

Although recovery is important for all athletes, full-time workers need to place an increased emphasis on it. This is one area where macho doesn't work – recovery is one of the ways we'll make huge gains on those who are attempting to pack high volume training into an already busy life schedule.

### **Passive recovery**

Passive recovery involves resting. While a nap after a hard session isn't an option for most of us, a regular good night's sleep is the key passive recovery strategy – there is nothing you can do better to recover than sleep well.

Sleep is the time when the body recovers and builds the most, and crucial hormones such as testosterone are more freely released into the system. It should not be messed around with. It's also free and pleasant, so make the best of it! You will know you are getting enough sleep when you wake up naturally rather than to an alarm. If you do wake up un-naturally, and especially if you don't feel refreshed when you do, then try to get to bed earlier.

Mental relaxation, in whatever way possible, is another important passive recovery strategy. Cortisol is the main 'fight-or-flight' hormone produced by the body in response to stress, but it isn't meant to be a constant drip-feed into our system and too much is damaging.

Our brain is unable to distinguish between cortisol released by mental or physical stress. For example, when our cortisol level is elevated the 'delta phase' of sleep is compromised and it is this 'deep sleep' which produces most repair and recovery. This is just one example of how mental relaxation can help regulate cortisol and aid recovery.

Conversely, there will be times when work, family and life in general unavoidably produce high amounts of stress and added cortisol. At these times it may be necessary to reduce our training load somewhat in order to lessen overall stress levels.

### **Active recovery**

There are a number of active recovery strategies such as stretching, foam rolling, and massage. Try to incorporate these into your weekly routine as much as possible.

Light exercise, such as zone 1 cycling or gentle swimming, are also useful during times of heavy training as they help keep the muscles from getting stiff and sore.

## **AFTER – NUTRITION**

The main rule is to eat food which has gone through as little processing as possible – plain, unprocessed food. For example, a glance at the label of any commercial recovery drink or sports bar reveals a list you will hardly be able to pronounce. Much of these are not real foods.

It is also possible to get the benefits of good food for a fraction of the cost and without ingesting an array of unknown substances. For example, use home-made fruit smoothies with nuts and hemp as a recovery drink. And substitute sports bars with dates, bananas or similar high glycaemic index (slow release) fruits while on the bike.

One exception, where commercial recovery products should be considered, is after a hard workout. This is the '20-minute recovery window' when the body is most prepared to absorb nutrients – particularly protein – and begin the re-building process. It has three main stages:

Rehydrate: no matter how much you drink on the bike you will usually be dehydrated at the end of a session and you should rehydrate with water (between 250ml and 500ml) and an electrolyte mix if you have sweated a lot. Top up your carbohydrate stores: try to get 30g of carbs in, which normally equates to one medium banana or one energy bar. Now it's time for protein and this can be taken on-board in liquid/shake form or bar form (or both).