

# BEST-LAID PLANS...

**It's all very well sketching out intricately detailed plans ahead of your big event, but will they really help you?**

***Jim Cotton heads to the drawing board***

**N**ew year, new you! You're going to train harder, eat healthier and sleep better, all in pursuit of higher placings and better

results in your goal events for 2019. But in the back of your mind, you know that these token resolutions won't last beyond January. So, instead, why not look to improve your results another way: through more stringent planning and preparation for each target event?

Rather than spending the season fretting about the monster mountains or breakneck pace in the peloton of your goal rides for the year, consider what could be gained from deconstructing each ride in advance; planning your tactics, pacing and nutrition?

Much was made of the intricate detail of Team Sky's planning for Chris Froome's Giro d'Italia-winning stage 19 ride, in which he cracked then-leader Simon Yates and distanced his closest remaining rival by 40 seconds. Documents obtained by the BBC revealed the master-plan devised to launch Froome into the pink jersey, a strategy that mapped out his pacing and nutrition almost to the kilometre. This kind of information is usually kept secret by Team Sky, but after all the pressure put on them following Froome's performance that day, amid the salbutamol case still ongoing at the time, they released it to show how much they put into such a ride, and how breaking it down makes the ride look less daunting.

#### **The training**

Before you even go near the nitty-gritty of the detailed planning for the ride, you need to schedule your training correctly, to be as specific as possible to the demands of the route. Focus your





Team Sky gauged their Giro-winning effort down to the last gel

preparation on the key elements of your fitness that will be required on the big day, be it short, punchy intervals for road racing, long, steady efforts for mountain climbing, or threshold work for time trials.

**The tech**

Another 'basic' to consider is your set-up, particularly relevant for big mountainous events. Are you going to be taking on the huge climbs of an Alpine event such as the Marmotte? If so, you're not going to want to take your deepest wheels and racy 11-25 cassette; shallow, lightweight wheels and a cassette the size of a dinner plate are the name of the game here.

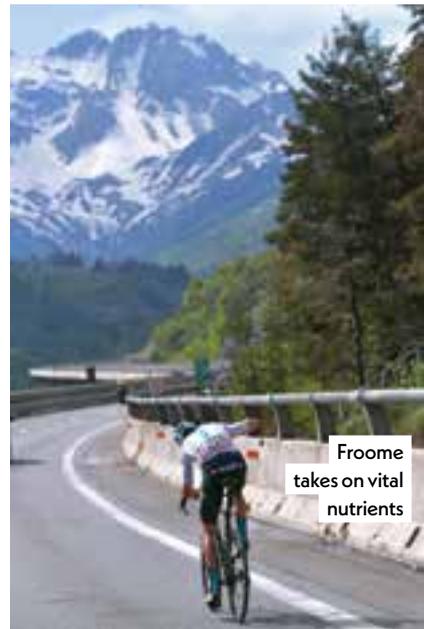
**The route**

You should be able to find the route of your event online, and this will hopefully include an elevation profile. If there's no profile, you could use the map provided to build the route yourself in a website such as Strava, Garmin Connect or Ride with GPS,

**“Knowing the course is key to gaining the upper hand over your opponents”**

which will then produce an elevation map for you. You can now identify the key sections of the course: the climbs, the descents, locations of the feed stations. Use this information to break down the course into around five or six clearly differentiated chunks, and work out their rough distance. These sections will form the bedrock of your plan. For a race, it's worth

focusing on the route a little longer. Knowing the course, particularly the final kilometres and any possible pinch-points in towns and villages, is key to gaining the upper hand over your opponents. While pro teams have the luxury of riding or driving the route before a race, they also fall back on good old Google if time is limited: "A lot can be done on Streetview on Google Maps," says Conor Taylor, performance scientist at Team Sky. "Look out for dangerous areas such as roundabouts and road furniture, and use this to get a good idea of where you want to be positioned." Knowing where to be on those tricky sections could make the difference between making or missing that crucial breakaway.



Froome takes on vital nutrients

**Can you plan like the pros?**

CW takes inspiration from Sky's Giro d'Italia stage 19 schedule for Chris Froome and cooks up a big-ride plan suitable for mere mortals

	TEAM SKY	REAL LIFE CONSIDERATIONS	TRY THIS
<b>BREAKFAST</b>	400g rice 200g juice Egg (3 whites, 1 yolk) 4 pancakes with jam Green tea with honey  <b>Equating to:</b> 996 kcal — 190g carb and 31g protein	Breakfast is the key meal of the day for your ride. Even if staying away from home, you should be able to whip up a Sky-like breakfast, provided you take a few basic items with you.  Remember, Froome's fuelling is based on a ride that Team Sky expected to last 5-6 hours, and to fuel a rider of 69kg. Calculate your intake needs.	100g oats with milk prepared as porridge (approximately 2 large bowls in total) 2 slices toast with jam 2-3 eggs  <i>This will give you similar carbohydrate and protein levels to Froome.</i>
<b>TACTICS AND PACING</b>	Team Sky split the Giro's 19th stage into seven sections, setting estimated durations, target powers, and fuelling requirements for each	This can be very easily mimicked — follow our guide as to how to split up the ride, set target pacing, and plan out your nutrition. Of course, you must remember that you won't have multiple team staff and a team car at your disposal — so remain flexible.	Aim to consume the following every hour: <b>1 gel</b> <b>1 carb drink</b> <b>1 energy bar or 1 flapjack or 2 bananas</b>  <i>This will provide you around 80-90g carb per hour</i>
<b>ON THE BIKE</b>	2 plain rice cakes 14 gels 2 energy drinks  <b>Equating to:</b> 2,348kcal — 96g carb per hour	In the absence of a team car supporting you and room for 14 gels in your pocket this can be hard for someone riding on their own. You can still plan how many calories you'll need for the time and the course and therefore how much to carry. If you can get a friend or family member to pass food and drink up, even better.	Within 20 minutes of the event: <b>1 recovery shake</b>  Then, as soon as possible afterwards, have a meal including: <b>Fast-release carbs such as white rice or white pasta</b> <b>Portion lean meat</b> <b>Portion veg</b> <b>Portion fruit</b>
<b>RECOVERY</b>	70g recovery smoothie Haribo sweets Cherries 400g rice with syrup 4 banana slices  <b>Equating to:</b> 2,348kcal — 420g carb and 76g protein	Froome's recovery meal is huge — but remember he's refuelling for stage 20 of the Giro. If you're not competing again the next day, you don't need as much as this. Refuel with a portion according to the ride planned for the next day. The focus here is on replacing carbohydrate and protein reserves, but don't forget your fruit and veg.	Aim to have a plate that consists of: <b>50% mixed veg</b> <b>25% lean protein</b> <b>25% wholegrain carbs such as brown rice, quinoa, sweet potato.</b> <b>Be sure to get healthy fats in there, such as nuts, olive oil, avocado etc.</b>
<b>DINNER</b>	Details and measures are unclear, but includes: Rice Salmon Eggs  <b>Reported to equate to:</b> 971kcal — 184g carb and 32g protein	As above, Froome's dinner is large as he's refuelling for another day of racing. You should have a meal of a size appropriate to the energy you'll need for the next day. If you're not riding, a portion similar to your regular dinner or slightly larger is appropriate. If you're competing again the next day, scale it up.	

**Tactics and pacing**

Having a good gauge of your fitness level is also essential, and you should have gained detailed insight into your form during training. If you have a power meter or heart rate monitor and know your training zones, it's time to use this invaluable information to the utmost. When you're forming your pacing

strategy, break it down to slot into the five or six sections you identified when analysing the route. Keep it simple at first. For example, section one: easy; section two: steady; section three: full gas. At this point, you're painting out a bird's-eye view of your big ride. Once that's done, it's time to get a little more sophisticated and consider the level

of power or heart rate you want to sustain during each section. To do this, you need to consider how long each section will take. At this point, Strava is your friend. Identifying the segments on your ride will enable you to note the times achieved by those of a similar ability to you; use the filters such as 'Athletes I'm following' or 'Athletes 35 to 44' etc to help you narrow



Power and heart rate in conjunction allow you to precisely pace long race efforts

it down. You can now make an estimate of the time required for that segment, based on the pace at which you plan to tackle it. Extrapolate from this estimate a sensible heart rate or power to aim for on the big day, taking into account the demands of the ride as a whole.

It's best to plan a power or heart rate range, rather than trying to nail down a specific number. As Taylor explains: "We come up with a range of power or pacing. You just don't know how you're going to feel on the day. You may have a plan you're looking to execute, but when you get into the race you don't know if you'll be feeling like you expected."

### Fuelling

Next up is how to fuel your legs through the day. This is of particular importance for long events such as sportives and Gran Fondos, but is equally applicable to shorter races and time trials. The principle that underpins your fuelling

## "We come up with a range of power or pacing. You don't know how you're going to feel on the day"

plan is that to ride hard over a long period, you need to take on 60-90 grams of carbohydrate per hour. Team Sky identified that Chris Froome would need a whopping 500g of carbohydrate — 14 gels and two SiS Beta Fuel drinks — for the race, which took just over five hours.

You'll have identified roughly how long your event will take when you considered pacing, so you can then calculate an approximate carbohydrate intake for the ride, working on the magical 60-90g per hour. Now distribute this total across the chunks of the ride that you created at the start of your planning process.

It's important to remember you won't want or be able to take on fuel at a steady rate through the ride. You need to ensure

you front-load your fuelling, and start off with solids to allow digestion time. What's more, you need to consider when it will be possible to eat. If you're going full-gas in a breakaway or tackling a technical descent, fiddling

around in your pockets won't be feasible.

Of course, just as your pacing strategy has to include some flexibility, so should your fuelling, particularly in racing. As Alex Dowsett of Katusha-Alpecin points out: "While I've always got my 80g per hour in mind, races can be frantic, so if there's a lull in the pace early on, it's best to throw a little bit more down then, just because you can; if you get the first few hours right, the rest tends to look after itself."

If you're riding a shorter event, you should be able to carry all your own nutrition in your pockets, and so can work out exactly what bars, gels and drinks you're going to take. For a long event, however, you're not going to fit

all the products you need into your pockets or on to your bike and will need to restock. This is where that initial route analysis is key, as you should have identified where the feed stations are, allowing you to decide where to stop and how much nutrition you need to start the ride with. Bigger events tend to detail the nutrition partner for the event, and so you can investigate their range and get a feel for what may be on offer, so that you know what to grab at the feed station.

### The weather

Modern weather forecasting is mercifully accurate. At a basic level, inappropriate clothing on a cold or wet event could ruin your day. As such, on the day or morning before travelling to the event, you need to know what to pack. Obviously, it's always best to pack for all eventualities, but websites such as [accuweather.com](http://accuweather.com) and [metcheck.com](http://metcheck.com) provide excellent and typically very accurate forecasts that break down the weather by the hour — there's no excuse for getting your wardrobe choices wildly wrong.

On a more sophisticated level, knowing the weather can help your pacing strategy too. If your event has a long, flat section and you're forecast to head straight into a 30kph wind, for example, you can plan for the extra effort that will be needed.

Websites such as [mywindsock.com](http://mywindsock.com) or [epicrideweather.com](http://epicrideweather.com) are becoming very popular for race preparation, with Team Sky advocating the use of the latter. These sites can be used to map weather forecasts and wind directions onto your route down to the level of Strava segments

— well worth using if wind is likely to exert a significant influence on your event. Weather should guide your tech choices: if you're expecting significant crosswinds, you'd best leave those deep-section wheels at home.

### Best-laid plans...

As the saying (almost) goes, 'the best laid plans of mice and cyclists often go awry' (thanks Robert Burns). Planning out your ride to the meticulous level of detail that we've just been through isn't going to guarantee you success. When Froome launched his 80km solo breakaway at the Giro, he had benefited from sitting in the wheels of a dedicated team for the first hours of the stage, had hordes of support staff handing him up gels and drinks through the stage, and of course, was treated kindly by Lady Luck.

With riding comes unpredictability and uncertainty; the weather might change, you might puncture or drop your vital gel, or you might just have bad legs on the day. The likelihood of you being able to execute your plan to the minutiae is unlikely, but that's not to say that preparing the plan is a waste of effort. Indeed, 'failing to plan is planning to fail'.

As Taylor points out, "You've got to have a plan going into these big rides, whether you're Chris Froome or a weekend warrior. But remember, at any point the environmental or race conditions can change. Plan the things you can control as much as possible, and then be adaptable."

Having spent time creating the plan means that you're fully aware of the route, your fitness, and the relevant way to pace and fuel yourself over certain parts of the ride — and that knowledge will make it easy for you to flex your tactics.

Being well prepared with a detailed plan means that rather than spending the night

and morning before the big event fretting about what might happen, you can relax in full knowledge that you've done all that you can. And a lot of the time, that easing of nerves is sufficient to enable you to perform at your best and fully enjoy the ride.

### RIDER'S VIEW

## 'How long-range planning worked for me'



**CW spoke to Tom Kirk, who raced at elite level in UCI category 2.2 stage races including the Rás in Ireland, Tour of Morocco and Tour of Serbia while working full-time towards a PhD in sports exercise and nutrition**

For semi-pro stage racer Kirk, planning his time around work and studying was key: "I would train very early in the morning and go into work a little later, or I would do split days when I was unable to move my work hours. I would also make the most of facilities at work — the gym bike they have there — to fit in around any specific meetings."

And it wasn't just about planning day to day, explains Kirk, but also long-term that was essential for building towards the big races. "I'd ensure that I planned my training in advance to have bigger blocks of hard sessions around times when I knew that my work wouldn't be as hands-on, looking at my schedule well in advance."

One thing to remember is that the paperwork side of going overseas can be time-consuming, and without a team of admin staff such as those at Team Sky's disposal, you need to be well organised. "I made sure I'd had my vaccinations and organised my visa and got a bike box well in advance of going away — to make sure I wasn't caught out," adds Kirk.



Strava is an invaluable planning platform