



Infographics: Winning road cycle races: a Team Sky perspective

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Infographics: Winning road cycle races: a Team Sky perspective

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WINNING ROAD CYCLE RACES A TEAM SKY PERSPECTIVE

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1 TEAM PHILOSOPHY

Marginal gains = cycle of continual improvement and surrounding yourself with the best team



2 MEDITERRANEAN AND WELL-BALANCED DIET

Mediterranean diet to maintain the athlete's overall cardiometabolic health (1)(2).



3 DIET WHEN ON-BIKE

When riding your bike for more than one hour, generally aim for a carbohydrate intake of 60g/hour and use a mixture of water and electrolyte drinks, drinking to thirst.



5 PLAN AND MONITOR YOUR TRAINING

Generally, week-to-week increases in training volume should be no more than 10%. A 'hard' session should be followed by a lighter session, with at least one rest day per week.



4 HYDRATION

Monitor the colour of your urine to assess your hydration, aiming for a light yellow colour (corresponding to numbers 1-3 on the chart).



COLOUR CHART

1	GOOD
2	GOOD
3	FAIR
4	DEHYDRATED
5	DEHYDRATED
6	VERY DEHYDRATED
7	SEVERE DEHYDRATION

6 CROSS TRAINING

Do at least one non-bike training session per week. Strength and conditioning work has been shown to improve bike speed and endurance capacity (3), without causing weight gain as well as reducing injuries.



7 MULTI-DISCIPLINARY SUPPORT TEAM

includes doctors, psychological support, Physiotherapy, nutritionists, sport science and 'carers' who bring their individual expertise to the team and athlete.



8 POST-EXERCISE RECOVERY STRATEGIES

- Compression garments
- Ice-baths
- Post-race massage and stretching
- Good quality sleep, aiming for at least 8 hours sleep per night.
- Good personal hygiene.
- Appropriate 'stress' management.
- Post-exercise nutrition: glass of milk immediately post-ride with a well-balanced meal containing carbohydrate and protein within 30 minutes of finishing the ride.



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9 REDUCING EFFECTS OF TRAVEL

- a. Chewing gum with xylitol e.g. pre-flights, to reduce risk of infections when flying
- b. Stay well-hydrated during the flight, avoiding alcohol, and keep mobile in-flight.
- c. Start adjusting to the new time zone before you leave.
- d. Compression stockings.



- e. Ideally arrive at least one week before the race, to allow your body to adapt to the new time zone and environment, including heat exposure.
- f. Consider flight times in relation to training and racing plans to minimise infection risk to athlete.
- g. Review risks of travel in multi-disciplinary team and if any precautions, e.g. travel vaccines, food, water, etc, need to be planned.

10 HEALTH SCREENING

- a. Pre-season medical
- b. Regular blood screen.
- c. Vaccinations – influenza; hepatitis A and B; traveller's diarrhoea.
- d. Regular wellbeing monitoring via the team performance support app.



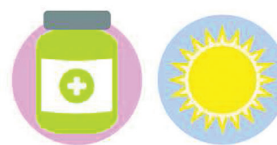
11 ON-RACE HEALTH MONITORING

- a. First pass urine osmolality and early morning weight checks to assess hydration.
- b. Early morning health screen to detect infections early.



12 TEAM PROTOCOLS

- a. Infection prevention and antibiotic protocol.
- b. Hand hygiene.
- c. Exercise in the heat guidelines
- d. Altitude camp protocol. Generally 'live high, train low'.



13 EXPERT MANAGEMENT OF COMMON CYCLING MEDICAL ISSUES

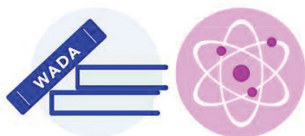
- a. Infection – commonest reason for being 'off bike'. For example, for common cold viral infections use zinc lozenges at a dose of 80mg/day started within 24 hours of symptoms and continued for up to 2 weeks.



- b. Trauma. Road rash, with associated wound management, and fractures from falls, especially management of clavicular fractures.
- c. Overuse injuries, especially common around the knee (e.g. patellofemoral pain) and low back pain.

14 ANTI-DOPING

- a. Education of the athlete around anti-doping issues and ensure they are kept up-to-date on WADA anti-doping guidelines.
- b. Knowledge and understanding of the athlete's biological passport.
- c. All athlete medication checked with globaldro.com.



15 DIETARY SUPPLEMENTATION

- Generally not needed if you have a well-balanced diet but ones to consider with appropriate review:
- a. Vitamin D, particularly in winter months.
 - b. Probiotics to reduce incidence of upper respiratory tract and gastrointestinal infections.
 - c. Iron, particularly if considering altitude training.



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