Infographics: Winning road cycle races: a Team Sky perspective

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Infographics

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.

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).

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.

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

REFERENCES
**Infographics**

**REDDING EFFECTS OF TRAVEL**
- Chew gum with xylitol. e.g., pre-flight, to reduce risk of infections when flying.
- Stay well hydrated during the flight, avoiding alcohol, and keep mobile in-flight.
- Start adjusting to the new time zone before you leave.
- Compression stockings.

**HEALTH SCREENING**
- Pre-season medical.
- Regular blood screen.
- Vaxisions – influenza, hepatitis A and B, traveler's diarrhea.
- Regular wellbeing monitoring via the team performance support app.

**ON-RACE HEALTH MONITORING**
- First pass urine osmolality and early morning weight checks to assess hydration.
- Early morning health screen to detect infections early.

**TEAM PROTOCOLS**
- Infection prevention and antibiotic protocol.
- Hand hygiene.
- Exercise in the heat guidelines.
- Altitude camp protocol. Generally ‘live high, train low’.

**EXPERT MANAGEMENT OF COMMON CYCLING MEDICAL ISSUES**
- 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.
- Trauma. Road rash, with associated wound management, and fractures from falls, especially management of clavicular fractures.
- Overuse injuries, especially common around the knee (e.g. patellofemoral pain) and low back pain.

**ANTI-DOPING**
- Education of the athlete around anti-doping issues and ensure they are kept up-to-date on WADA anti-doping guidelines.
- Knowledge and understanding of the athlete’s biological passport.
- All athlete medicine checked with globaldro.com.

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

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