



Fuelling Fitness for Your Sport

Track Cycling

About sprint track cycling

- Sprint track cycling involves a range of events from sprints to kieran to individual time trials. These events require intense efforts that generally last for less than 90 seconds
- Longer track events such as scratch races and the Madison are better suited to endurance-trained cyclists and athletes competing in these events are referred to the "[Fuelling Fitness for Road Cycling](#)" article.
- Sprint track cycling relies on speed and strength and the ability to create a large power output. Power to weight ratio is important for sprint cyclists who aim to maximize muscle mass while keeping body fat levels reasonably low.
- Sprint track cyclists will do most of their training on the track, in the gym and possibly on a stationary bike. Often training on the road is incorporated early in the season or to break up training to assist base fitness and maintain suitable body composition.
- World Cup track meets are held throughout the year with elite track cyclists earning points to qualify for World Championships and Olympics. Track cycling is usually held over the summer months in Australia on both indoor and outdoor velodromes.

Training Diet

- The aims of the training diet are to balance energy intake for high quality training and recovery, to enhance strength gains and training adaptations, and to maintain appropriate body fat levels.
- The training diet should be nutrient dense and provide a variety of foods from all food groups.
- The training diet does not need to include the large amount of carbohydrate typical of road cyclists. Inadequate carbohydrate stores would rarely be a limiting factor to sprint performance. Sprint track cyclists should consume 3-4g carbohydrate/kg body weight/day, depending on training phase.
If longer duration training sessions are incorporated into training programs,



carbohydrate requirements will increase.

- Sprint track cyclists have relatively high protein requirements (~1.6-1.8g protein/kg Body Weight) to gain and maintain muscle mass and strength. Lean red meat, chicken, fish and low fat dairy products provide good amounts of high quality protein.
- To help achieve appropriate body fat levels, sprint track cyclists should limit energy dense foods including chocolate, pastries, soft drinks, alcohol and takeaways. These foods can add excess calories and contribute to higher than desirable body fat levels.

Fluid Needs

- 'Tracks' or velodromes can be indoors or outdoors, therefore conditions vary considerably. Fluid requirements vary considerably dependent on volume and type of training and the environment. Athletes need to know their individual fluid requirements to avoid under or over consuming fluids.
- Track bikes don't have bidon cages, therefore fluid intake during track races is not practical or possible. Fluid intake in the pits between races and during training is important but excessive fluid intake is not required and could leave a cyclist bloated or uncomfortable.

What Should I Eat Pre-Event?

- Carbohydrate is rarely a limiting fuel source in a sprint event. For sprint events the pre-event meal should leave the athlete comfortable and psychologically ready for the event more so than providing any particular mix or amount of macronutrients.
- The pre-event meal should be eaten ~2-3 hours prior to the warm up, and foods lower in fat and fibre are generally better tolerated. For example, fruit salad + yoghurt, breakfast cereal with skim milk, tinned spaghetti on toast.

What Should I Eat/Drink During Competition?

- Often athletes will be racing several times over a night/day and there is plenty of opportunity to eat and drink between races.
- If the competition is stretched over a whole or several days, the athlete needs to ensure adequate carbohydrate, protein and fluid are maintained over this time. The total amount of carbohydrate/protein required over the day would be consistent with training days. Racing schedules may



interfere with regular meal times and smaller meals and snacks between races may be more appropriate.

- If the time between races is short then drinking fluids such as a sports drink rather than eating is appropriate.
- Nervous athletes or those unable to eat during a competition may benefit from sports food supplements such as bars or gels to maintain appropriate energy intake during competition. However, these are not usually necessary in addition to normal meals and snacks
- Excess food and/or carbohydrate beverages during breaks and over the competition day could contribute to excess energy and consequently weight gain and/or leave the athlete bloated/uncomfortable

What About Recovery?

- Recovery from a day of racing is important especially if racing again the next day. Recovery nutrition includes both between races and at the end of a day of racing.
- Being prepared with appropriate food, fluid and supplement choices is a good strategy. Regular foods such as sandwiches, yoghurt, cereal bars, and low fat milk drinks are useful. Some specialised sports foods containing protein and carbohydrates such as [powerbar performance bar](#) may also be appropriate especially if appetite is suppressed after high intensity racing. Being prepared can help prevent a trip to the food stall and potentially dangerous temptations!
- After a day of racing a substantial meal including both carbohydrate and protein such as stirfry with meat & vegetables or baked fish with salad and rice is also important to assist with recovery.
- Recovery after training helps maintain training performance. High intensity sessions including resistance training should be followed by food/drink containing **10-20grams protein and ~1g carbohydrate/kg bodyweight** (ie 80g for 80kg cyclist).
- For athletes with restricted energy diets, this may be planned to fit in with a usual meal.

It is suggested that consuming food/drink containing 10-20g high quality protein prior to resistance training could enhance recovery. The following foods provide approximately 10g protein:

- 200g low fat yoghurt,
- 50g tinned tuna/salmon, 40g lean chicken,
- 35g lean beef/lamb,
- 1 cup low fat or soy milk or
- 2 eggs.



- For ideas on recovery specific for strength training see [fact sheets](#) on 'increasing muscle mass' and 'protein for athletes'.

Other Nutrition Tips

- Supplements are used widely in road and track cycling, with some being well researched and supported by science while others are poorly researched. It is important to be completely aware of the ingredients and legality of any supplements (including herbs, vitamins and minerals) taken.
- Creatine is scientifically supported to enhance strength gains and recovery between repeated bouts of short high intensity training. For information on Creatine refer to the [Creatine Fact Sheet](#)
- Bicarbonate may also be useful in sprint events to buffer the lactic acid build up. The usual dosing of bicarbonate is 0.3mg/kg body weight 1 hour prior to exercise, however appropriate dosing should be practiced in training under the supervision of a sports dietitian or sports scientist.

How to get involved

Visit Cycling Australia at www.cycling.org.au to contact your local state cycling organisation

Author: Tanya Lewis Sports Dietitian (SDA SA)