

## WELCOME TO ACTIV8

It is the season to be jolly! Friday the 18<sup>th</sup> of December will be our Christmas Ride. We will leave Activ at 5.30pm, complete a short lap of the River and then head to Veneziano's for discounted coffee! The Activ Team would like to wish you and yours a very **Merry Christmas and an active New Year** full of fun, health and fitness! **Activ will be closed from the 25th of December through to the 2nd of January. Rides will commence again on Sunday the 3rd of January at 6am.** Check the website for details. Looking for the ideal Christmas gift? Then don't forget **Activ has gift vouchers** that can be used in store or for training sessions. Please continue sending your contributions for Activ8. We want to keep it real and ensure that the newsletter meets your needs and interests. Introducing some familiar faces as our newest annual members:



Debra McCosker



Tommy Hogan







Helen Bianchi



Grant Botica

Congratulations to all that successfully competed in the first two Twilight Criteriums at Nundah in the last fortnight. It has been great to see the Activ colors out there having some fun. The orange and black kit is certainly visible in the pack and making a statement. A special mention goes to Kim Pettigrew who blitzed the females in her race to take out the first woman crown last week. Well done, Kim! The training (and new bike) is paying off!









### Enjoy your December Activ8. This edition has:

-  **Our latest news and specials**
-  **To Carb or not to Carb? That is the question – Peta's view**
-  **Criterium Racing – Cameron's advice**
-  **Our December Member of the month – Robert Henderson**



*Cameron*

## OUR LATEST NEWS AND SPECIALS

-  The **Mooloolaba Tri Course is now on the CompuTrainers**. Book in for a Wednesday a.m or p.m session to create your baseline then plan your CompuTrainer sessions with Cam to plot out your race goals. **Prizes** are on offer for the best improvement so register now.
-  The next **beginners course is in February** and limited places remain so book in to avoid disappointment.
-  We have **retail discounts of 15% and 20%** respectively for 6 and 12 month members so check out our price tags for your discount. While stocks last MET helmets are 10% off for non members and up to 25% off for annual members. Helmets should be regularly checked, be of Australian standard and replaced every 18-24 months or immediately if they have been cracked due to an accident or decent knock/drop.
-  **December special extended!** Continental GP4000 tyres \$69.95 each! Offer extended til the end of January!
-  Check out the new **SIS and BSc nutrition** information and options in store.
-  Activ is trialing a third level of weekend outdoor training to cater for those stronger than the social riders but not quite as strong as the intermediates, fondly called the **Skinny Lattes!**
-  New kids CompuTrainer sessions started last Saturday. To coincide with the school holidays, Activ Cycle Coaching has introduced a school children CompuTrainer session to be held Saturdays at 11am. The sessions will run for one hour. Parents are welcome to stay and watch, go have a coffee or do some shopping. Please note the bikes must have a wheel size of either 650c or 26inch to fit on the CompuTrainer.
-  Make someone's Christmas special this year by giving them the **new Garman 500**. Its new smaller, sleeker size is suitable for short head stems and with all the features of the 705 minus the map option it is the perfect bike computer upgrade!

## TO CARB OR NOT TO CARB? THAT IS THE QUESTION.

By [Peta Hood](#) (Accredited Practising Dietitian/Sports Dietitian/Exercise Physiologist)  
Lifestar Nutrition and Exercise Physiology

Carbohydrate plays a fundamental role in sports performance, but very few athletes understand exactly *why* and *how* optimising their carbohydrate intake can optimise their performance. Carbohydrate is a macronutrient (along with protein and fat) made up of smaller units of sugars - the main one being *glucose*. When carbohydrate foods such as rice, pasta, or fruit are eaten, they are broken down into glucose, which enters the bloodstream, providing important fuel for working muscles and the central nervous system (brain) during exercise. Carbohydrate is therefore of benefit to physical and cognitive (brain) performance.

Carbohydrate (glucose) is the predominant fuel source for exercise of moderate to high intensity, because it can be metabolised anaerobically (when oxygen availability is limited), whereas fat cannot. Any excess glucose not metabolised during activity is combined with water and stored in our muscles and liver as a molecule called *glycogen* – a storage form of energy for later use. Only occasionally is excess glucose converted to fat.

Carbohydrate is found in foods such as breads, cereals, pasta, rice, potato, sweet potato, corn, fruit, dairy products (yoghurt and milk), crackers, muesli bars, baked goods, sports drinks, bars and gels, lollies, soft-drink, cordial, honey and sugar.

### So how much Carbohydrate do I need?

#### Daily...

The daily carbohydrate needs of athletes vary with training **intensity**, **volume**, and **level of fitness**. High intensity bouts of training such as efforts, hill work or sprints may warrant a higher daily carbohydrate intake, as well as phases of training where sessions are of longer duration (> 90 minutes) due to muscle glycogen being depleted after this time. Interestingly, one of the adaptations that occurs with aerobic training is an enhanced ability to burn fat, and therefore less reliance on carbohydrate as a fuel, during moderate intensity exercise. Therefore, someone who is new to training or returning from a break will need more carbohydrate in their daily diet than a well-trained individual.

Situation	Recommended Carb Intake
Daily refueling needs for training programs less than 60-90 min/day or of low intensity	5-7 g per kg bodyweight/day
Daily refueling for training programs greater than 90-120 min per day (standard training)	7-10 g per kg bodyweight/day
Daily refueling for athletes undertaking extreme programs - 6-8 hours per day (tour or charity ride)	10-12+ g per kg bodyweight/day
Carbohydrate loading for ultra endurance events	7-10 g per kg bodyweight/day

Source: Australian Institute of Sport . Fact Sheet: *Carbohydrate – How Much?* URL: [www.ausport.gov.au](http://www.ausport.gov.au)

#### During Exercise...

To determine your carbohydrate requirements for an individual exercise session you need to ask yourself two questions: how **long** will the session last, and how **hard** will it be?

The body metabolises glucose at a rate of about 1g per minute during moderate to high intensity exercise<sup>1</sup>. Therefore, you utilise approximately 60g of carbohydrate per hour during moderate cycling, and even more at high intensities. If your session is longer than 90 minutes, it is recommended that you take some carbohydrate on board with you. Recommendations are to consume **30-60g carbohydrate per hour during exercise (eg a gel)**. Most cyclists wouldn't think of taking carbohydrate on board for short, high intensity sessions such as efforts or a crit; but in a crit for example, a small amount of carbohydrate consumed around the 20 min mark, may improve your ability to perform in the sprint. Carbohydrate in the form of sports drinks or gels takes around 15-30 mins to be absorbed and utilised by the body, so you should aim to commence consumption of carbohydrate early in a race or training session so that you are well-fuelled for the entire event. This can be via consumption of whole foods, gels, bars or sports drink. Recent research<sup>2</sup> also suggests that when multiple carbohydrates (e.g glucose + fructose, or maltodextrins + glucose – available in some gels) are ingested together, carbohydrate availability and oxidation increase, which may lead to improved performance.

### For Optimum Recovery...

It can take up to 24 hours to replenish muscle glycogen stores when they are completely depleted<sup>3</sup>. If you are planning to race or train again within 24 hours, rapid replenishment of muscle glycogen via adequate carbohydrate consumption becomes particularly important for optimising your performance the next day.

Recommendations are to consume **1-1.5g per kg bodyweight of carbohydrate in the first 30-60 minutes following exercise** eg a bar, recovery drink, jam sandwich, lollies, banana

1. Coyle, E. (2004) Fluid and fuel intake during exercise. *Journal of Sports Science*. 22: 39-55.
2. Jeukendrup, A. (2008) Carbohydrate feeding during exercise. *European Journal of Sports Science*. 8(2): 77-86.
3. The Australian Institute of Sport. (2001) *Powerbar. Current Concepts in Sports Nutrition*.

## CRITERIUM RACING

By [Cameron Hughes](#) (Accredited Cycling & Triathlon Coach)  
Activ's Head Coach

In the November Activ8 we discussed bunch riding communication. This edition we are going to look at some hints for successful criterium racing.

Criteriums are short, fast races, run over 800m to 2km circuits, which often involve lots of corners. These races are normally run over a set period of time 20-60min, but they can go longer. They usually conclude with a short number of laps, normally three, at the end of the timed period.

**Before you can race.** You will need a cycle racing license from your preferred club. Activ supports Lifecycle. Then you will need a bicycle which is legal and safe to ride. This means no profile bars, lights, pumps, mirrors or spares kit on your bike. You must have road bike handlebars and conventional wheels (no disc wheels). You will require an Australian Standard approved helmet, cycle clothing, including a jersey with your club logo and we also suggest you wear gloves to protect your hands. You are now ready to race.







You should try to **arrive** at the event at least 40min before your start time. There will be a **registration** table and the officials will ask you what grade you are? We suggest you start in a lower **grade** then you think, this way you can learn how to race. Once you have your **number**, pin it on the back or side of your jersey depending on what the officials tell you. Then **warm up**. It is a good idea to ride around the course to get a feel for it, taking note of the best racing lines and any dangerous/tricky areas. Warm up well as criteriums usually start fast and hard.

A **race** can start from a standing start on the start/finish line or as a rolling start, which is under the control of the officials. These controlled periods are ridden at a slower pace and everyone stays together. This allows you to get a feel for the course. Make sure you know how many laps are neutral. Don't be afraid to ask the officials.

Once under way there are a couple of things to keep in mind. Riders generally race to their strength. For example those that can't sprint will try to get away throughout the race, while those that can sprint will sit on and stay out of the wind and do as little as possible until the last lap. Riders who don't really have a strength or a plan usually start the early breaks and attack the bunch randomly. Then there are riders who are work horses or domestics that do all the work on the front for their team leader or sprinter.

**A golden rule of racing is never do any work unless it's for your benefit or the benefit of a team mate!**

### Racing Etiquette

-  Always ride safely and treat your competitors with respect and courtesy
-  Don't make any sudden sideways movements, always try to ride in a straight line
-  Don't dive under or chop other riders in corners
-  Think before attacking in a race, but don't hesitate for too long
-  Try not to let gaps open up between wheels and stay in the front third of the pack out of the wind
-  Most importantly treat the officials with respect.

### criterium Racing Rules

Some criterium rules are very different to road racing.

- 🚴 If you have a mechanical/accident, you are allowed a lap out. There is an exception to this rule which is once you start the lap count down, you are no longer allowed a lap out.
- 🚴 If you get dropped and lapped by the field you are allowed to continue but must not affect the race outcome and pull out of the race safely once the lap countdown starts.
- 🚴 It's illegal to join in with another grade while racing. You can and will be disqualified if you do.

Remember, if you have a plan try to stick to it. If you are sprinting for the win, ride in a straight line. Once you cross the line, back off the speed and follow the rest of the riders off the track, and remember there may be another group racing so stay either to the outside or inside of the course depending on which is the safest. If you think you have placed then you must go to the officials and claim your place, in other words tell them where you think you finished. Finally remember as an amateur you must not take both hands of the bars at any time during the race, even when crossing the line first!

So you know have all the knowledge you need to go out and do your first Criterium race. Of course it is a good idea to have some training in the legs. Good luck! **ENJOY YOURSELF....SAFE RIDING....HAVE FUN!**

### PRO CYCLING NEWS FLASH

He may have been down but he is definitely not out! Robbie McEwen is back on track for the 2010 World Champs in Melbourne next year.

The Tour Down Under is just around the corner. How exciting for both those going to down to Adelaide and those of us that will get to watch the TV coverage. Aussie, Aussie, Aussie, Oi, Oi, Oi!

### Activ Cycle Coaching's Member of the Month

*Each month we will introduce you all to the Activ Cycle Coaching's Member of the month. Votes for your January member are welcome now. Just email Cameron [Cameron@activcyclecoaching.com](mailto:Cameron@activcyclecoaching.com)*

### Introducing Mr December – Robert Henderson!

#### Why did you become a member of Activ?

I was looking for a coach who I could respect and someone I could take inspiration from and when I heard that Cameron was coaching I knew I had found such a person. I also need a coach that would push me to my limits but knew how far to go. The people that I have meet through Activ cycles are great and have become really good friends, they are people you can have a laugh with and share the "pain" of the day's ride.

#### What are your cycling goals for 2010?

My goals for the year ahead are to be competitive in Masters B road races and to have a Podium finish in at least one race. Another recent goal for 2010 is to beat Karl up all hills. As part of my training I have a goal to be able to get to 4 - 4.5 watts/kg for a 5 min interval this could be a world of pain for me.

#### What do you do when you are not riding your bike?

That doesn't leave much time, as my wife Kate will attest to I tend to spend a lot of time resting and recovering. I love catching up with friends, drinking good wine and eating out at good restaurants. You should always remember good friends and good wine always make for a good night out.

#### Cycling words of wisdom you would like to share:

For criterium racing: If you're not going forward you're going back.

For training: There's a fine line between being committed to training and being committed. Some may say I am a little compulsive or obsessive when it comes to training. But hey, if that's what's set on the program then that's what has to be done.