

## WELCOME TO ACTIV8

Construction, extensions and 8 more CompuTrainers! What an exciting time and you are all a part of it! By next week we will have 8 more CompuTrainers in our extension and soon thereafter they will be available for use. Initially booking spots 33-40 will be done manually and you will be required to contact Activ to secure your spot. It won't be long though and you will be able to book the extra spots online as normal.

Thanks for being patient during the construction of our extensions. We have appreciated your interest and support.

This month we would like everyone to check to see if they have accidentally 'borrowed' any of the CompuTrainer **skewers, cadence magnets or sweat towels** and if you have please return them to Activ. We understand how easy it is to leave with any of these items and be unaware of it so please don't be embarrassed to return them on your next visit.

We have a record 33 new cyclists enrolled in our beginners course that starts on Saturday! Thanks to everyone who have invited their friends and family to enroll. Sheree and I get great pleasure helping others develop the skills to allow them to enjoy their cycling so we are looking forward to the next 4 weeks with our newbies!

### Enjoy this edition of Activ8, it contains:

- ❖ **Our latest news**
- ❖ **"BB" (Before Bunny) pre-Easter weight loss challenge! – Cameron's info**
- ❖ **A fructose + glucose blend for endurance performance: a competitive edge – Peta's advice**
- ❖ **The importance of pacing – Rod's Recommendations**
- ❖ **Activ member section – Member spotting**
- ❖ **Our member of the month – Mr February – Rossco Hames**

*Cameron*

## OUR LATEST NEWS

- ❖ **REFER A FRIEND MONTH.** For the month of March, refer a friend to Activ Cycle or Tri Coaching who joins as an annual member and receive a free month of membership. Please ensure you email [Cameron@activcyclecoaching.com](mailto:Cameron@activcyclecoaching.com) to confirm the referral for your free month.
- ❖ **BIKE LIGHTS.** It is that time of the year again when we need bike lights, front and rear to start our outdoor rides. Activ Cycle Coaching have a good range of lights for your bike, please feel free to discuss your options with one of our coaches.
- ❖ **HELL OF THE WEST & BRIBIE.** Congratulations to all our members who competed recently in the Hell of the West and Bribie Tris. We hope you enjoyed your event and we were pleased to hear your fantastic results. Bring on Mooloolaba! It is just around the corner!
- ❖ **SIZZLING SUMMER SERIES.** The Sizzling Summer Series starts at Crestmead on the 27<sup>th</sup> of February and we have Activ members competing so why not get involved and support the team!
- ❖ **STAFF.** Activ is looking for staff in our expanding business so please talk to Cameron about our needs, if you know anyone with experience that might consider joining our team.
- ❖ **CALLING ALL MUMS.** Come and join our "Latte Club" at 9:30am on Tuesdays (Indoor) and Thursdays (Outdoor), followed by coffee. It's a great opportunity to improve your cycling, meet new people and have fun. Contact [admin@activcyclecoaching.com](mailto:admin@activcyclecoaching.com) for more information.
- ❖ **LACTATE THRESHOLD TESTS.** Our Lactic Threshold Tests ensure that you are training in your correct zones. Essentially, the test ensures that your time in training is efficient and effective. Please contact [headcoach@activcyclecoaching.com](mailto:headcoach@activcyclecoaching.com) to book in or if you require further information.

## “BB” (BEFORE BUNNY) PRE-EASTER WEIGHT LOSS CHALLENGE!

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

One in three resolutions fail by February<sup>[1]</sup> so we at Activ urge you to stay on track! It's not too late to resurrect your New Year's resolutions if they have lapsed so here are the [Heart Foundation's](#) top five tips to making a New Year's resolution for keeps:

1. **Pick one.** Just one. There may be a few changes you'd like to make and they may well be worthwhile, but you'll have more chance of success if you concentrate your efforts on just one goal at a time.
2. **Health by stealth.** Be specific about what you want to achieve and if you can, break it down into smaller milestone goals. For example, 'to eat more healthily' is very broad. Try first switching to low or no fat dairy foods, then increase your daily fruit and veggie intake by one serve every two weeks until you're getting your 2 and 5 each day, then restrict takeaways to once a week.
3. **Seal the deal.** Tell friends/ family about the resolution you've made or post it on Facebook or twitter. The verbal/written commitment helps you to stay on track.
4. **Don't do it alone.** If you can't rope someone into taking up a challenge with you, drop a few friends a one line email each day about the journey or post your progress regularly on Facebook – good and bad. It helps keep you committed and friends will provide plenty of encouragement.
5. **Keep lapses in perspective.** A weak moment is exactly that and doesn't undo all your weeks of commitment. So don't punish yourself - accept the lapse for what it was and get back with the program.

With these great tips in mind,  
we reveal our

### “BB” (Before Bunny) pre-Easter weight loss challenge!

If you would like some extra motivation to achieve your weight loss goal, register your current and goal weight with an Activ coach and we will support you in your weight loss journey in the **9 weeks before Easter.**

It doesn't matter if your goal is to lose a little or a lot, all members that register and achieve their goal by the 21<sup>st</sup> of April will go into the draw for the major prize of one month's free membership!!!

<sup>[1]</sup> <http://www.suite101.com/content/mew-years-resolutions-hard-to-keep-a185460>, accessed 31/01/11

## A FRUCTOSE + GLUCOSE BLEND FOR ENDURANCE PERFORMANCE: A NEW COMPETITIVE EDGE

By [Peta Hood](#) (Accredited Practising Dietitian/Sports Dietitian/Exercise Physiologist)  
Lifestar Nutrition and Exercise Physiology [www.lifestarnutrition.com.au](http://www.lifestarnutrition.com.au)

Carbohydrate, from blood glucose and muscle glycogen is an important fuel source for moderate to high intensity endurance exercise. As breathing rate increases, resulting in a reduction in oxygen availability (usually > 70% VO<sub>2</sub> max)<sup>1</sup>, carbohydrate becomes the main fuel source for working muscles. Beyond 90 minutes of moderate to high intensity exercise, ingestion of carbohydrate (in the form of food, gels or drinks) becomes essential for reducing fatigue and optimising performance. This is because muscle glycogen stores start to deplete, and we rely more heavily on *blood* glucose for fuel.

A large body of research investigating the rate at which carbohydrate is oxidised during endurance exercise has focused on glucose, indicating that glucose is oxidised at a rate of about 1g per minute at moderate to high intensity<sup>2</sup>. Recommendations for carbohydrate intake during exercise have therefore been to consume 40-60g of carbohydrate per hour for exercise lasting longer than 90 mins. The mechanism by which glucose oxidation is limited to 60 g/hr is thought to be a reduction in intestinal absorption of glucose beyond this point. The intestinal transporter molecule responsible for absorption of glucose becomes saturated at 60g/hr, preventing further absorption at higher intake. This has led researchers to consider other methods of delivering more carbohydrate into the blood stream during exercise. It is possible that if another intestinal transporter molecule could be used (e.g. the fructose transporter) we would be able to absorb more total carbohydrate.

Recent research in which cyclists were given sports drinks containing a combination of glucose + fructose or maltodextrin + fructose (ratio 2:1), as opposed to glucose alone, found that carbohydrate oxidation rates as high as 105g/hr can be achieved. This is approximately 75% higher than what was previously thought to be the absolute maximum for carbohydrate oxidation. In addition, intake of a blend of carbohydrate during exercise as opposed to glucose alone appeared to improve fluid absorption, thereby assisting with hydration.<sup>3,4</sup>

To achieve this rate of oxidation, intake of carbohydrate has to be very high, which may not always be practical, or tolerated. However, the gut is extremely adaptable and with individualised advice and practice, there is significant benefit to be obtained through the consumption of sports products or foods containing a 2:1 glucose:fructose ratio (e.g. SIS products, bananas, Powerbar C2 max range), particularly during exercise lasting longer than 2-3 hours, where carbohydrate availability is crucial for optimum performance.

*If you would like some professional guidance on how to include more variety in your diet to benefit both your health and performance, book an appointment with Peta by phoning 0438 551 289.  
Peta consults at Activ on Tuesday evenings.*

### References:

1. Romijn, J. et al. (1993) Regulation of endogenous fat and carbohydrate metabolism in relation to exercise intensity and duration. *American Journal Physiology Endocrinology and Metabolism*. 265:E380-391.
2. Coyle, E. (2004) Fluid and fuel intake during exercise. *Journal of Sports Science*. 22: 39-55.
3. Jeukendrup, AE. et al. (2010) Powerbar International Sports Nutrition Conference Proceedings. AIS. Canberra.15.
4. Jeukendrup AE. (2010) Carbohydrate and exercise performance: the role of multiple transportable carbohydrates. *Curr Opin Clin Nutr Metab Care*. 13: 452-457.

## THE IMPORTANCE OF PACING.

by [Rod Cedaro](#) (M. App. Sc.) Consultant Exercise Physiologist  
ACC Accredited Level III Triathlon Coach and Activ Tri-Coach

The key to successful distance running is pacing and tempo - finding something you can sustain, spreading the effort over the duration of the run and then upping the ante over the closing stages of the run is the most economical approach to your running. Come along to any Activ Tri quality session and you will see for yourself.

Think about the analogy of driving your car. If you want to get the best possible fuel economy when driving on the freeway you use the cruise control. This minimizes accelerations and decelerations of the car and holds it at a cost speed.

Accelerating a mass is more costly from an energy perspective than maintaining the same velocity of that mass. So, whether it is a car or a human body the same principal applies - try to maintain constant speed.

With running (unlike driving) however there is another significant consideration. Not only is it more "costly" to accelerate your body, but also the "quality" of fuel used changes. As we accelerate the body starts to shift away from using fat as its main energy source to using more and more carbohydrate (blood glucose and muscle glycogen) to supply the required energy - in our car analogy this would be like having two separate fuel tanks - one which is stocked with relatively cheap standard unleaded petrol and a second which is full of premium unleaded.

As we start to tap into our "premium unleaded" (carbohydrate stores) and exceed our "anaerobic threshold", blood lactate production increases at a faster rate as well. So, a brief period of high intensity effort elicits a substantial physiological cost and the accumulation of H<sup>+</sup> (acid), which inhibits muscular force production.

An early misuse of pace (e.g. going out too hard on the run from the bike/run transition) results in lactic acid accumulation that cannot be eliminated without a subsequent decrease in speed. The loss in speed as you try to recover more than exceeds the time you pick up during the early intensity burst. In fact it has been calculated that every second gained by going over your optimal pace in the first half of a race, 2 seconds are lost in the back end of the event due to premature fatigue. Even pacing doesn't mean going under your ideal pace it means sitting pretty much right on it from the onset and precisely distributing your effort over the distance of the event and then accelerating over the closing stages, rather than the reverse of going out too hard and then dying over the back end of the race.

Fitness alone however is not enough to accomplish this. You need to develop a keen sense of pacing and tempo running to achieve this and this only comes with practice. This is why I try to encourage this metronomic rhythm into each of you at our threshold sessions.

To illustrate just how important optimal pacing is I've collated a couple of great examples of even paced runs over 5km, 10km and the marathon - at the time these performances were world records and still very slick even today, what you'll notice is how incredibly evenly the splits are throughout with a marginal acceleration over the closing stages.

### Example One: 5km - Haile Gebrselassie (Ethiopia)

Splits for each 1000 meters:

1000m	2:34.04
2000m	2:34.60
3000m	2:34.20
4000m	2:31.23
5000m	2:30.20
Total:	12:44.39.

Notice how Gebrselassie was able to "run on" and accelerate over the closing stages by even splitting through the first 3/5 of the event averaging an incredible 4.07 per mile.

### Example Two: 10000m - Haile Gebrselassie (Ethiopia)

Splits for each 1000 meters:

1000m	2:42.20
2000m	2:39.47
3000m	2:39.87
4000m	2:37.61
5000m	2:42.55
6000m	2:41.20
7000m	2:40.87
8000m	2:42.31
9000m	2:43.44
10000m	2:34:00
Total:	26:43.53

Again in this example he was able to "kick for home" in the last kilometre off a relatively even paced effort during the first nine kilometres. His average pace per mile for the 10km was just a tad under 4.20!

Finally, let's review the pacing used by another Ethiopian at the 1988 Rotterdam Marathon in Holland. At this point, this was a world best for the marathon.

Rotterdam is about as flat a course as you'll get for a marathon, it is out and back and on this particular day there was no wind. The Ethiopians came over and used this as their Olympic Trial race for the '88 Olympics, so it was a quality packed field. As is the practice with many high profile marathons around the world the event organisers provided two "rabbits" (or pace setters) for the first 10km.

### Example Three: Marathon - Belayneh Densamo (Ethiopia)

Splits for each 5km:

5km	15:05
10km	15:00
15km	15:01
20km	15:06
25km	15:00
30km	15:01
35km	15:09
40km	14:58

Finish (42.195k): 2:06:50. His average pace per mile 4:52:16.

So, in short, it doesn't matter what distance you're running over, take a tip from the best in the business, the most economical way to perform to your best is to run as evenly paced as possible for the vast majority of the event and aim to accelerate over the closing stages.

## THANK YOU FROM BETTER BODIES

*The staff at Better Bodies would like to thank all the members of Activ Cycle Coaching for their support over the last 8 months. It is with great regret that we have decided to close the clinic at Activ Cycle Coaching at the end of February. We would like to thank Cameron and Toby for their amazing support in promoting our services, this assistance has been greatly appreciated. Better Bodies will continue to practice out of our Norman Park clinic where Lucinda will be joining our team on Thursdays. Should any of you wish to continue your treatments with either Julie or Lucinda, appointments can be made by calling Julie on 0407 327 323. Once again, thank you for your support.*

## BIKE WEEK 12 – 20 MARCH 2011

A week where everyone can ride - Bike Week is Queensland's major celebration of all things cycling – from transport through to recreation.

Bicycle Queensland has a program of fun events to create even more of an opportunity for passionate cyclists to get on their bike, and it's a great introduction to cycling for others.

Don't miss out on your opportunity to ride through the CLEM7 Tunnel in the BDO Brisbane Coot-tha Challenge, Great Brisbane Bike Ride or Taste of the Tunnel Rides on Sunday 20 March.

Many of the week's events are FREE! For more information and to register visit [www.bq.org.au](http://www.bq.org.au)

## ACTIV MEMBERS SECTION



### Member Spotting

Thanks to everyone that supported the Flood Relief Ride with Lance Armstrong. It was great to have so much Orange and Black supporting such a great cause. Emily Davies and her team at [CHEM](#) did an awesome job getting the ride organised in a few short days. Congrats Em, we are all proud of you!

What a feather in our cap to say that we have ridden with Lance Armstrong!

### MEMBER OF THE MONTH – MR FEBRUARY – ROSSCO HAMES

**Congratulations Rossco!** Thanks to Dave and Connie Silvestri you have won a \$50 voucher to Arrivedici Pizza, Park Road, Milton. ENJOY!

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

After a transition from a Mountain Bike to a Roadie the desire to improve my riding ability and fitness saw me talking to Cam at Activ and trying an Indoor Session. He was 'gentle' on me and the rest is now history.

#### What are your cycling goals for 2011?

To become a 'solid' Skinny Rider. I need to improve my Hill Climbing technique so it doesn't look like I have engaged reverse gear whilst the rest of the Pack pedal merrily away!  
I am thinking about a Cycling Trip to Japan for 10 days. I luv the idea of combining a holiday to a nice destination and cycling.

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

I'm a 'wage-slave' so work features highly during the week.

I am a Life Member of the Nissan Patrol 4WD Club and am currently the Training Coordinator. Every two months I conduct a weekend Training Course for new Club Members at a property just out of Samford.

I enjoy watching Rugby Union and support the Hurricanes in the Super 15..

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

Most people look good in lycra and some people look GREAT! :-)

Buying a new bike is great fun and very exciting and it really does make a difference to your enjoyment on the road!