

About the Author

With 30 years' experience in cycling and triathlon, Colin Leeson is a leading authority in affordable, quality performance components for the cycling and triathlon industry.

Colin is the owner and manager of the brand **TLR Performance** which supplies a broad range of Cycling, Running and Triathlon products. He has a passion for sport and loves competing in triathlons and sharing his knowledge with others.

Introduction

Triathlon is a unique sport combining the three disciplines of Swimming, Cycling and Running. Triathlons come in a variety of sizes and difficulties ranging from introductory events for first timers, through the sprint distance events and up to the ultimate endurance event the "Ironman Triathlon".

Many people come to the sport of Triathlon having previously focused on one of the three sports. In my case this was both cycling and running where, as a teenager I was a very competitive runner and keen recreational cyclist. It wasn't until I was in my mid 20's that triathlons started to become more well-known and after being invited to come watch a friend at this Australian event called "Noosa Triathlon" I decided to form a team and have a go for myself. Well I went in the event and was immediately hooked and have been doing triathlons ever since.

Starting the TLR Performance brand gave me the fantastic opportunity to contribute to, and make a living out of a sport that I love.

In the "**Starting out in Triathlons**" series of eBooks I will share my experiences and take you through the basics of triathlon and cover topics which will help you understand how a triathlon event works, the equipment you will need including where best to spend your money, some of the Gotcha's you may come across, training programs and a multitude of tips.

I hope you get some real value from this series and hope to see you in a triathlon event somewhere, sometime.

Colin Leeson

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Cover: Part of the vast range of nutrition and hydration products available on the market.

Nutrition and Recovery

If the Transition is known as the 4th leg of a triathlon then Race Nutrition would be known as the 5th leg. While you are exercising your body is burning calories and sweating fluids and if you are not replacing these then sooner or later you will run into trouble. Following a nutrition program to manage this loss is very important.

When talking about Nutrition I like to separate the fluids part of the topic and call it Hydration. Nutrition and Hydration play a part in all triathlons; however as the length of the event increases Nutrition and Hydration become exponentially more important.

The second part of the story is what you as an athlete should do after a race or training session. This post activity recovery is very important as it dictates how well you recover and how quickly you can move to the next event or training session.

In this eBook we will look at nutrition for training and events and I will share some of my learnings, experiences in the creation of my race nutrition plan. We will also look at a few techniques I have learned for recovery.

Note: There is an enormous amount of theory and research into these topics which has been done by people a lot more knowledgeable on the subject than I am, so this eBook is meant as an introductory overview with a few tips that I have learned through my years in the sport.

Nutrition and Hydration

The bike leg of a triathlon is a great opportunity for a triathlete to replenish calories and fluids already burned, and to accumulate some for the run. In my training for Ironman events, my coach Warwick refers to the bike leg as the “rolling smorgasbord” where you consume as many calories as the body can handle. Obviously the need for consuming calories in a 12hour Ironman event becomes much more important, but paying attention in this area can make a difference in even the sprint distance triathlons.

There are a lot of different products for both providing nutrition (calories) and hydration and an equal number of theories on consumption. Some people don't like the taste or consistency of various brands so make their nutrition plan based on what works best for them. I have a couple of favourite brands and products which I will share but recommend trying a few to see what works best with you.

Next we will breeze over some of the Nutrition and Hydration options then quickly move on to the more important topic of your nutrition plans.

Nutrition

For the purposes of this eBook we are calling Nutrition the 'foods' or calories you are consuming during a sporting activity. "Foods" you may consume include:

- Energy "gel" products.
- Energy bars.
- Honey Shotz
- Food e.g. muesli bars
- Fruit e.g. Banana
- Lollies
- Vegemite Sandwiches

The benefit of "Gels" is that they are a liquid product in a sachet which is quickly and easily swallowed. During longer events I use a gel bottle which holds 4 gel sachets. The bottle (pictured on front cover) sits in a bottle mount on my bike for easy access.

If you like energy bars a good idea is to cut them into portions before the event. Bars are great energy but I personally prefer the fluid methods like gels.

Honey shots are straight honey. In recent years honey has been found to have great benefits for athletes.

Depending on the activity, many athletes carry some type of food. Favourites include bananas which give a quick hit of energy, Muesli bars which give prolonged energy and lollies which give a quick sugar hit.

Those living in Australia will know what Vegemite is. Vegemite contains salt which is good to replace salt lost through sweat.

Hydration

Hydration products are what you would add to your water bottle. These products mainly focus on electrolyte replacement and some also include sodium, magnesium and calories.

These types of products come in either sachets or tablets and have comprehensive details on what they replenish on the packaging.

Troy, who is a good friend of mine, is the Australia distributor for PureSports hydration products. He is very knowledgeable on the subject and his website contains some great information. If you want to know more on this subject he will be only too happy to answer your questions. <http://www.puresport.net.au/>

The Nutrition Plan

The triathlon Nutrition Plan is the main topic I want to cover in this eBook. A nutrition plan is a detailed plan of what you intend to consume through your race. Your race nutrition plan is something personalised to your body and it needs to be refined and practiced during your training.

Triathlon events usually have major nutrition and hydration brands sponsors who provide products for the race. Particularly for longer events it is a good idea to find out the brands in advance and do at least some of your training using the brand to be sure it works for you.

This section contains a few ideas based on what I have learnt and tried for my race nutrition plan.

The day before:

The first thing to take care of is to be well hydrated before the race or event. This means focusing on fluid intake on the day before the event and on the morning of the race. A good tip I learned from my coach is to stay as cool as possible the day before so you don't become dehydrated due to heat.

Race morning:

Keep taking some fluids but not enough that you are feeling bloated or needing multiple trips to the toilet (because triathlon toilet queues can be very long). Some hydration products suggest using the drinks both pre-race and during the event so if you use these products start on the hydration plan ahead of time.

In all races I do I have a gel about 15 minutes prior to the start. The gel is just entering the bloodstream as the event starts giving you energy right from the beginning. In a triathlon, where the swim is first, this becomes even more important as it is your only nutrition before the bike leg.

The Race Nutrition Plan

Once you begin the bike leg the main race nutrition plan and the "rolling smorgasbord" I mentioned earlier should start. Depending on the length of the event and the time taken in the swim the plan will vary.

In a longer event lasting a couple of hours or more, I work on a plan that has a 10 min drink cycle and a 20 min food cycle during the ride. To manage this I set a 10 min alarm on my Garmin watch and use it as a reminder. If you don't have this capability you can keep an eye on the speedo time and do something every 10 mins. In the run leg, aid stations are usually spaced every two or three km and for most athletes this is a 10-15 minute spacing which still fits the plan frequency pretty well.

My Nutrition Plan items

For my nutrition plan I like to use a combination of three or four items in my food cycle with differing purposes:

Gels My main energy source is through gels – these generally come in caffeinated and non-caffeinated varieties and I use a maximum of 1 caffeinated gel per hour.

(Caffeine tricks the mind into thinking that the body has more energy than it actually has. For some this might not normally be desirable however during a race this can be a great mental asset.)

An example I found that demonstrates the need for training with the products is with the GU brand of gel. I am quite partial to chocolate and like the taste of the GU “Chocolate Outrage” gel satchels. I found though after three or four hours they tasted too sweet and the thought of another made me feel sick. I mixed them up with the slightly tamer Vanilla flavour with about two vanillas to 1 chocolate and found the ratio to work well.

Honey Shotz I have grown to like the honey shotz and find the sweet taste is not overbearing and it is easy to get down. The sachets are small and easy to use as well.

Vegemite sandwiches Australian sandwich spreads such as Vegemite and Marmite are high in salt.

I like to introduce a small bite sized piece of white bread with Vegemite into my nutrition plan after about four or five hours. By then I am usually losing more salt through sweat than my hydration plan is replacing so this is a small top-up. I usually also feel like something small and solid in my stomach by this stage and the white bread is easy to digest.



I use one slice of bread to make a small sandwich, cut it into four or five small “fingers” then put these in a small Ziploc bag. Consuming these at about one per hour means enough for 4-5 hours in the one bag.

Note. Many athletes also use salt tablets for salt replacement.

My Hydration Plan Items

I use both water and electrolyte bottles on my bike and generally alternate sips from each bottle. On a particularly hot day and when I can feel salt building up on my tri suit from the sweat I have extra electrolyte drinks in the cycle.

On the run course not every aid station has electrolyte drinks so I make sure to pick one up when running through an electrolyte station.

In the longer events many athletes also use drinks like Coke or Red Bull for the caffeine hit.

My Long Course Triathlon Nutrition Plan

In my long course triathlon nutrition plan the cycle leg will look a little like this:

As soon as I get on the bike I have the first gel and a drink.

Note: This is important to remember when counting out your supplies i.e. at the 20 min mark you are not having your first gel, you are having the second so remember to count the first.

At 10 mins into the bike leg I have my second drink. As I said, I carry two drink bottles, one containing an electrolyte drink and the other has water and I follow a 10 min drink cycle alternating between bottles.

My 20 min food cycle typically looks like this:

- Top of the hour a caffeinated gel
- 20min past the hour a normal gel
- 40 min past the hour a Honey Shotz or later in the event a vegemite “finger”

Once you start the run leg you are reliant on the position of the aid stations. I like to know roughly where these are for my mental preparation. This is so I am not stressed as to how far the next drink is away and I also find it becomes a small goal to continue running between each aid station.

I try to keep the water and electrolyte cycle going as well as I can with the aid station spacing. Usually I lean towards the electrolyte with a sip of water at the same station. BTW. I have found that as you practice using both these fluids, your body will give you an idea of which one it needs.

I find in an Ironman length triathlon that by the run I am looking for something else solid to eat. If the right lollies are there I will grab a few of them. If you are still going after something like 10 hours you may really like some food. At my last Ironman they had some nice cookies and I had a couple at about this time.

My Shorter Distance Triathlon Nutrition Plan

In a short “sprint triathlon” event the swim may only take you 10 mins, the ride less than ½ hr and the run something like 20 minutes so working a nutrition plan for this event is less important. In this length event I will have the usual pre-race gel then one about 2/3rds of the way through the ride so it is starting to work at the run time. For Hydration I usually only have an electrolyte bottle on my bike and alternate water and electrolytes on the run.

In an Olympic Distance event lasting between two and three hours my nutrition plan might have two or three gels through the 1 to 1½ hour ride and another in the early part of the run. Use the same 10 min water / electrolyte drink cycle.

Nutrition Summary

By now it will be clear that your nutrition and hydration plan is an extremely important part of your race strategy and it is something that needs to be refined through your training. As I mentioned at the start of this section, there are many products available for your nutrition plan and there is also a huge amount of technical material available if you wish to use it. My simple hope is that my plans give you an idea of where to start with the process of developing your own race nutrition and hydration plan.

Recovery

When you finish an event or a training session you switch to recovery mode.

If you are training with a coach or squad they will no doubt have plans for recovery and you should follow their advice. A well-formed training plan that a coach would give has training sessions timetabled in a manner to give enough rest between events for the body to recover. There is a lot of information available on the internet for recovery.

A good coach will have tips for helping the body recover and it is a few of these that I am going to share next.

Ice bathing

I have really only discovered Ice Bathing over the last couple of years and have been amazed at the benefits it provides. As a recovery tool this is extremely valuable.

At my triathlon club we have an ice bath running at 12 degrees Celsius. After every training session we spend about three mins standing in the in tub to promote muscle recovery. An ice bath is a luxury that not everyone has available however there are alternatives.

The two methods I use are:

- Cold water with ice in the bath.
I do this with either bags of ice from the shop or large blocks that I freeze at home.
- Cold pool.
During winter in Brisbane my swimming pool gets down to about 15 – 16 degrees C which is plenty cold enough for a winter ice bath.

In both methods try to stay in the water for three minutes, and do this once or twice for normal recovery.

Compression

Using compression for recovery is an area which is gaining a lot of popularity for athletes. Compression helps the body to move any lactic acid which has built up in the legs.

Compression recovery can be done using compression socks or stockings which can be purchased from many sports brands. Elite athletes use a more advanced method using air pressure devices to massage and pressurise the legs.

The NormaTec Recovery System is an example of this technology and this YouTube video gives a quick overview on how it works <http://www.youtube.com/watch?v=oZPFXj49lck>

Injury

“Recovery” often includes dealing with injuries encountered through training or competing in events. In the last 18 months I have had a couple of injuries to deal with while training for the Ironman and I learnt a few neat tricks that I didn’t know beforehand.

My injuries during this time were; a problem with a heel, a long term knee issue and a sore rib/back. In all these cases I worked with medical professionals to fix the problems and with their knowledge used the following techniques.

Ice Bath In all cases the Ice bath was a great help. When using the ice bath for injury recovery I was typically doing a 3-5 min in the ice tub then 3-5 minutes out cycle, and repeating this three times.

Ice Block For my heel my physiotherapist recommended freezing some water in a cup and making a round ice block which I then roll under my foot. This gives both a massage and the benefit of the coolness.

Water Running With these injuries I used “water running” to keep some aerobic training without the strain on the injured parts of my body. Water running is using a flotation belt and you float in an upright position and run in the water (not touching the bottom)

Anti-inflammatories For injuries like the ones I was dealing with, an anti-inflammatory gel is often used. I use Voltaren gel and find it very good.

I learned a couple of good things about this type of medication with my heel injury.

1. You should not use an anti-inflammatory for an extended period of time (it even says so on the box). Mix the treatment with something like Comfrey ointment which is a natural product for longer term healing.

With my heel injury, when I have a longer run I will often experience pain for a couple of days afterwards. I typically use the Voltaren for the first 2 days then switch to Comfrey ointment (and use the Ice Block massage a few times a day).

2. One neat trick I learnt was the use of plastic kitchen wrap to wrap around the area where the above cream is applied. “Gladwrap” is a brand of this product in Australia. When you use a plastic wrap like this it helps the product absorb better into the skin.

I will apply the cream at night time then wrap a layer of gladwrap around my foot and then put a sock on to hold it in place overnight. I have been amazed by the improvement this has given.

Recovery Products

The last thing to touch briefly on is products that can be taken to assist with recovery.

The same large group of nutrition suppliers usually have post activity recovery products to assist with recovery. These suppliers have variety of methods to take these products and a variety of supplied benefits and you probably need to look at these in detail and try them for yourself to see which works best for you.

Remember for more info on this subject you can look at Troy’s PureSports website.

<http://www.puresport.net.au/>

I hope you found this to be useful information and I hope you put it into practice in your next big event.