

Ultra Trail Running Made Easy

A guide for misguided beginners

By Paul Ashton & Nigel Aylott

This article was originally written for publication in the Runners World Australia magazine shortly before Nigel's accident and untimely death in Sept 2004. But the magazine said it was too long for one issue. After all this time, I am now releasing it for general publication. I hope that it provides interesting reading and helps to assist in promoting our sport. and keeping alive the ideals and dreams that Nigel so passionately held to.

Regards, Paul Ashton 26th May 2006

(More about Nigel's phenomenal talent can be found here <http://www.ultraoz.com/nigelaylott.shtml>)

This guide is designed to introduce aspiring runners to the joys and wonders of safely competing in an Ultra trail run. It shares information from a range of sources that will hopefully allow both new and experienced runners to get more enjoyment from the sport of trail running and is particularly focused on the longer distances of ultra trail running. It should help the new runners to avoid a little pain in the discovery of this growing sport and help the experienced runner to tweak their running for ultra trail runs. In writing this guide Nigel and Paul have sought to show stage by stage (the essentials in transitioning for long distance road runners – marathoners, or shorter distance road and trail runners,) what is necessary to get out and enjoy some of Australia's best country with trail running.

This article on "Ultra Trail Running Made Easy" (dream on), covers:-

- What is ultra trail running – any running on trails in the bush over 42.2Km
- Why people do it – For the wilderness experience, for the challenge; for the achievement of running distances that people would take a week or more to bushwalk (and to be able to do it without a heavy backpack); for the scenery/views; and for the opportunity to get away from it all in the bush. Though, if you have to ask, you may never understand.
- Training – How to prepare yourself so that you can successfully complete a trail run over 5 hours
- Equipment – What equipment do you need on shorter training runs and what are the additional requirements for a 5 hour plus trail run
- Nutrition – the secrets to food planning, preparation and to not bonking
- Useful Tips – hints on how to avoid blisters, chafing, bonking.
- Top Runs A selection of 10 of our favorite runs from around Australia :

Overland Track	(Tasmania)
Southern Ranges	(Tasmania) - N
Larapinta Trail	(Northern Territory)
Katherine Gorge	(Northern Territory) -N
Cape to Cape	(Western Australia)
Jagungal Wilderness Run	(New South Wales) -N
Lamington NP (Glasshouse Mountains/ Misty Mountains Trail)	-(N Qld)
Wilsons Promontory	(Victoria)
Surf Coast Trail	(Victoria)
Razorback/Mt Hotham	(Victoria)
Churchill National Park	(Victoria)
Howqua River trail	(Victoria)

Information is set out on each of these runs to assist you in enjoying the scenery and splendor of some of Australia's most treasured wilderness areas.

Run information covers;

- Distance and approximate duration
- Best time to run
- Access and accessibility
- Run description / terrain
- Information on water, directional signage, precautions / warnings, navigation requirements, numbers
- Other information sources

Bush Code/Be prepared/ Emergencies

Paul and Nigel are both experienced but vastly different ultra runners and approach the sport with different aims. In this guide, we will present practical and tested advice to the faster runners who want to be at the front of the field (Nigel) and to those who make up the bulk of any running event (Paul). In doing this, you may find that occasionally the advice tends to differ in which case work out what sort of runner you are and try it out to see what best suits your running style. Note also that no one approach will suit every runner and you may find that the best strategies/equipment will vary depending on your fitness and the running conditions.

In starting this article we would like to point out that trail running is not without its risks; snakes, twisted ankles, cuts, dehydration, blisters, hypothermia, long hours of training, etc, but it is exactly these challenges that make it so worthwhile, that let you know that you are really alive as you explore some of the magical places in Australia and your own limits. In addition, it has the added benefit of letting you eat just about anything you want whenever you want to - eat to run or run to eat!

Training

As an indication of training we have outlined our basic training programs to give aspiring ultra runners an indication as to where they might want to pitch their training.

Nigel Road marathon time – 2.36

Overland track – 80km time – 8.05 best- 9.35 worst

Average weekly training program,

10 hours varied running including 1x 2 –3 hour long run, daily hour long run

12 hours cycling – 10 hours road, 2 hours MTB

3 hours kayaking

1 hour swim

(wow, no wonder I can't catch him! – Paul)

Paul Road marathon time – 4.10

Overland track – 80 km time – 12.27 best – 14 .27 worst

Average weekly training program;

1 x 45 minute spin cycle class

1 x 1 hour evening run (winter)

1 x 2 – 3 hour evening run - hills / intervals / LSD (Oct – Apr)

1 x long run each weekend between 2 – 6 hours (LSD)

(Winter – Snow Shoe running / XC skiing – 6 hours each weekend)

Intro – for runners with a base level of fitness

If you are aiming to do a run over 5 hours, then you will need to do some specific training. This doesn't mean that you have to go out and do 5 hour plus runs every weekend. In

fact, if you can get through a 2-3 hour run feeling strong, then you will be able to successfully tackle virtually any run. It will just be a matter of pacing yourself appropriately for the conditions and your current level of fitness.

Base Training

The idea of base training is to both strengthen your body and to get your body used to exercising for long periods. Some people like to do regular shorter runs mixed with cross training and some people prefer to do a once a week long run as their main method of building up a base. Both methods work, but the more regularly you can get out exercising, then the more your body will adapt.

Trail running is more stressful on the body than flat road running due to the hills, the uneven terrain with rocks and tree roots, tight corners, slippery ground and the need to vary the stride length and power to suit the conditions. This translates itself into new demands on the body, particularly for the feet, knees, calves, groin and upper body. Strength training for particularly the quads and lower abdomen can help here, but generally the best way of adapting the body to these new stresses is to go out and run in the typical conditions. However, especially for base training you will need to build up gradually using normal periodisation techniques – there is no point in going out too hard or too long initially and ending up sore (and injured!). You should find that your body will get used to the new stresses relatively quickly though – even being able to notice the difference from one week to the next.

Getting your body used to exercising for long periods is the other main requirement for ultra trail runs. When running a marathon, people typically run out of glycogen and hit the wall at about 30-35km. By training your body appropriately, by reducing the pace and intaking regular food, this distance does not need to be a limiting factor. The aim of this training is to teach your body to efficiently use its fat supplies as a source of energy. Everyone has sufficient fat reserves to be able to exercise continuously for days on end, so what is needed is to teach your body to tap into these reserves efficiently enough so that you can maintain your desired pace. In taking food (carbohydrate) in addition helps to make it easier for the body to provide the energy required.

To be effective in getting your body to adapt, sufficient training needs to be done so that your body runs out of glycogen and starts tapping into its fat supplies. Note that this is a simplification in that you will gradually change from using glycogen to using fats as a source of energy as you exercise. The better your body is at using fats, the earlier you will start using a bigger proportion of fat for an energy source and thus the glycogen will be conserved. If at the end of a long run, you are running out of energy and feeling like you will hit the wall soon, then you will be teaching your body to utilize its fat reserves and thus improving your long distance running. By depleting your glycogen stores in running a previous day (eg a 5km or 10km race), then you will hit the wall much sooner and your long run can be shorter. This means that for long distance running training, if possible it is good not to have a rest day before your long run. However, as long as you run for long enough to lower your glycogen stores and start utilizing fats, then you will be training your body to run for long distances.

Cross Training

Cross training is an effective way to increase the exercise time (and thus improve the fat adaptation) without over stressing your body. This is great when coming back from injury or when just starting up trail running. Swimming in particular is also very good for developing core strength. However, as with everything the best training for trail running is going out and running the trails.

Warm up / Cool down

If you are training longer distances than usual and trying to adapt your body to trail running, then your muscles will be tighter than usual and a good warm-up and cool down are essential. When starting off, if you are feeling tight and running slowly, don't try and push through with it. Instead, relax, take it easy and soon enough, your body will warm up and you'll be speeding along. It is also important to cool down properly at the end of a run to clear the lactic acid and waste products from the legs. No sprints to the finish line, or if you do, go for an easy 5 minute run around afterwards. Hopefully, for your long runs you will have found somewhere nice to run and taking it easy for the last 10 or 15 minutes will be a pleasant way to finish the run. Similarly, if you are feeling tight later in the day after a run, it is very beneficial to get in some light exercise to get the blood moving around the legs. This can be some gentle cycling, a walk around the block or some easy exercises with stretching.

Stretching/Massage

Many people don't like stretching before exercise since they haven't yet warmed up. This is particularly true if you have driven somewhere for your run on a cold morning. Instead, it is good to stop for some stretching a short way into the run after having warmed up. Stretching of the major muscles – quads, hamstring, groin and calves is particularly good here. Also, very good for recovery and for general flexibility is to stretch at the end of a training session. Being warm, your muscles should already be quite flexible and stretching at this time is a good way to improve flexibility as well as stopping the muscles from tightening and shortening as they cool down. It also helps to remove the waste products from the legs.

Regular stretching is good to keep the muscles flexible, but it can be harder to stretch the deeper muscles and also once tightened, muscles can be slow to respond to stretching. Massage is very beneficial here since it can focus on loosening up specific muscles. As well as massaging for recovery, massages should concentrate on lengthening the muscles to provide more strength and flexibility.

Tip – when stretching do not bounce the muscle, stretch hold for 20 seconds release and then stretch again

Event specific training – up hill, down hills, scree, walking, pacing, single track, Equipment/food/water/clothing/shoes and sox as per event. As mentioned above, the more trail running you can do the better. If you have a specific run in mind that you want to do, then you should include as much similar terrain as possible in your training runs and it should be at a similar pace to the pace you will go in the event. As well as uphill and downhill training, it should include single track, rocks, tree roots, mud, sand, water or anything else you will encounter on the event. You should also train at a similar pace. If you plan to do some fast walking, then practice fast walking in the middle of your runs. This will both strengthen your walking muscles and teach your body to swap between walking and running during an event.

Similarly, you should train with the equipment that you are going to use during the event. In particular, if you are going to carry a pack during the event, then practise carrying it during your training and have it loaded to a similar level. Also, you should practise with the same clothing, shoes and sox that you will wear during the event. This will both get you used to your equipment and test out that everything is comfortable and properly fitting. Drinking and eating should be practised on the run, and the particular foods and drinks that you plan to use should be tested. Having said this, it is also worth noting that it can be a good idea to occasionally not eat during a long run to maximise your fat adaptation. However, make sure that you carry some food just in case you hit the wall during the run.

Training to run downhill is worth mentioning specifically. Running downhill is a form of eccentric exercise in which your muscles are lengthening at the same time as they are providing force. This is very stressful on the legs, particularly the quads and calves, and results in minor muscle damage. The good news is that the muscles adapt very quickly to this type of exercise and will make major improvements in strength with just 1 or 2 downhill sessions a week. When first starting some downhill training, you should be very careful not to overdo it! However, this training is essential if your event includes a substantial amount of downhill running. Your training should also be specific to the type of downhill. Running down stairs, running down steep rocky slopes and fast running down gentle descents all put different stresses on the legs and you should train for them specifically.

Tip - Efficient running – relax and use core strength. Running should use the minimum effort possible. Motion should come from the core and your body should be relaxed as possible at all times.

Periodisation/rest/recovery

The normal training techniques apply when training for an ultra trail run. You are stressing your body, so make sure you get sufficient rest and recovery. Periodisation techniques in which you build up for say 3 weeks and then have an easy week, are especially good, since it allows your body to adapt. Because the running conditions will be somewhat unpredictable (you can't easily increase your distance/time by a set amount each run), you should listen to your body and be prepared to take extra rest if required. Quick recovery after training sessions is especially important. The use of cold water to refresh tired muscles works well as does the usual stretching, cool downs and massages. When you are training hard, it is also important to eat well getting plenty of nutritious foods.

Tips –

- Pace yourself – do not start too fast – you have a lot of time to settle in. The first hour of running should be at a comfortable pace.
- walk the hills, walk 1 minute every 30, walk the last 5 minutes of every hour.

Pre-Event/Post event

Pre-event you should be tapering to give your muscles a final chance to recover and strengthen. Close to a long event it is much better to err on the side of being undertrained than overtraining. After a few hours of an event, you will start to feel it if you have overtrained. Tapering should be slightly longer and slightly easier for trail running than for standard road events, since the body's recovery time will be slightly longer.

Post-event you should take a well deserved rest. However, getting in some gentle exercise will significantly help the recovery, so even if your muscles are sore, get out and do some light exercise. Take the opportunity to do some of the things that you wouldn't normally do!

Pre Event Sleep

There are differences in relation to how much sleep is needed prior to a major ultra. Some people get very little sleep the night before the event, others try and get to sleep early. The secret seems to lay in getting 2 good nights sleep prior to the night before the run.

Chafing

Chafing can sometimes be avoided by wearing the right clothing, particularly clothing that fits snugly to the skin. Otherwise, either some form of lubricant or taping of the affected spot should be used. It is worthwhile learning where you chafe and preparing appropriately before your run. Otherwise, you can take some lubricant or tape with you and treat as you go. As with blisters, the earlier you treat affected areas, the happier you'll be! You also need to be aware that chafing will be much more prevalent in wet conditions

and will also occur differently with different clothing, so make sure that what you wear works for you. Wet conditions may result from river crossings or even sweat, not just when it is raining. What doesn't worry you on an hour training run may get to be very significant after 5 hours of running.

Lubricants to use can be the tried and tested Vaseline. However, some people find that silicon creams and baby creams can be more effective staying on for longer, particularly in wet conditions. Taping can vary from band aids to strapping tape to duct tape. As long as it sticks to the skin and covers the affected area, then it will work. Getting it off afterwards may be the hard part though, so often this would only be used when doing longer races.

Tip – Learn all about your body - apply lubricant to known friction spots, eg; tips of toes, feet, upper inner thighs, inner cheeks of the buttocks, groin area, nipples, inner arms just below the arm pits, lower back (if carrying a pack). It all comes down to practice. Take a small container of lubricant on the run with you.

Equipment

For any longer training run, you will want good trail running shoes and comfortable clothing. Comfortable clothing will ensure that chafing is minimized and also help to regulate your temperature. New synthetic fabrics, such as coolmax, are much more effective at keeping you warm when wet than cotton as well as being comfortable in the heat. New wool fabrics can be very good and very comfortable, but are generally less robust than synthetic fabrics. Some suggestions for various items of clothing /footwear follow:

Shoes

If you are not going on rough or uneven trails then standard road running shoes will suffice, but if you do you will notice the extra rigidity and support of a proper trail running shoe. This will allow you to run faster with more control. Some things to look for in good trail running shoes are:

Good grip pattern on the outsole for both uphill and downhill running

Rigid around the mid-foot to provide good stability

- Good protection for the feet around the toes and the side to cope with sticks and stones encountered on the trails – this feature means that the shoes will be a little heavier and not quite as breathable in hot conditions so it may be a tradeoff depending on the running you are most likely to be doing
- Stiff inner shank in between the outsole (tread) and the insole/midsole to provide rigidity, support and protection for the foot from sharp rocks and other pointed objects under the shoe.
- Snug around the ankle to avoid grit entering the top of the shoe.
- Comfortable lacing system which holds the foot securely

Trail running shoes can also be specifically designed for wet conditions with goretex outers, for rock use eg when canyoning or coastering and also come in heavier or lighter models. The lighter models are designed for racing, but as a result have significantly less support and padding than the heavier versions. You should also ensure that whatever shoe you choose, it suits your foot, in particular, whether it needs support for overpronation, etc.

Socks

These come in variety of types and at a range of prices. There should be some stretch in the sock so that it fits snugly to your foot and doesn't bunch or slip on your feet which can lead to blisters. Ideally, your foot shouldn't slip or move in your shoe, but due to the terrain, there will be more movement of your foot in the shoe when trail running than road

running. This combined with the fact that socks and shoes can often be wet means that there are more demands on your socks. Snug fitting of the sock even when wet is the main requirement, but some people find that double layer socks are useful to avoid blisters. Whichever socks you use, ensure that you test them with your shoes to verify that the combination works for your feet. In very wet conditions, waterproof socks, eg Sealskinz, can be used. However, due to sweat your feet will still not stay dry.

Tip – avoid hot spots by turning your socks inside out so that the seam is not rubbing the toes.

Shorts

Your favorite running shorts can be used. However, when wet many running shorts can chafe the legs. For this reason, some people prefer wearing lycra shorts which move with the leg rather than chafing. Alternatively, a lubricant to avoid chafing can be used.

Tip – When selecting shorts check the location of the inner seam to avoid potential chaffing.

Jocks

These should be made from a stretch fabric, such as polyester/elastane or “speedo” bathers, not cotton to avoid any chafing when wet.

Tops

These can be a variety of weights, styles and arm lengths. Modern synthetic fabrics are very good at being cool in the heat, warm when wet and comfortable to wear. The thickness and style that you want will depend on the weather conditions and temperature. Light mesh fabrics are very good in the heat and heavier thermals are good in cold and wet conditions. Long sleeved tops are good when it is cold, and in particular long sleeved lightweight fabrics are good to protect from the sun and if going through scratchy vegetation.

If in cold wet or windy conditions, layering techniques should be used. The base layer next to the skin should be a synthetic thermal or wool fabric which moves moisture away from the skin to avoid cooling through evaporation. The next layer should be a thin insulating layers such as another thermal or windstopper vest which trap body heat in. The outer layer should be windproof, waterproof and breathable, so as to protect from wind and rain without trapping in moisture. Gore-Tex fabrics are typically used for this and are now available in very light weights. However, a variety of other wind and water resistant fabrics are available which can be used as the outer layer, particularly in less extreme conditions.

Tip – Wearing multiple layers is useful. Over a long run – 60km plus, you may find that there are occasions when you can not generate enough body heat and you start to cool down. That is the time to put on an extra layer.

Gaiters/ankle gaiters

If the run will pass through scratchy vegetation, then gaiters which protect the legs up to the knees may be advisable. Light weight gaiters, such as used in orienteering events, are available at significantly less weight than traditional bushwalking gaiters. Gaiters which cover over the shoe also have the advantage of stopping grit, sticks and stones falling in the top of the shoe. This will also work in snow and protect the shoe, socks and lower legs from grass seeds. An alternative to full length gaiters is the short ankle gaiters which will also protect the socks and stop objects getting in the top of shoes.

Hat /Bandana

Bandanas can be useful for keeping the sweat out of your eyes. Peaked caps are useful for keeping the rain off your face and providing shade, for summer trail running look for a lightweight hat preferably with a neck flap to shade the neck.

Tip - Keeping sweat out of the eyes – if this is likely to be a problem, then smearing a small amount of vaseline on your eyebrow works wonders for making sweat run away from your eyes. Alternatively, a wristband can be used to wipe the eyes.

What to wear / take on a training run

Clothing (male/female)

- Socks
- Tops
- Underwear
- Shorts
- Runners
- Hat
- Watch
- Sunglasses

Packs

You will want to carry a small pack with the following gear. Depending on the temperature and how much gear/water you need to carry, you can either use a small Camelbak style backpack using a bladder for water storage, or a bumbag with 1 or 2 water bottles on a hip belt. Backpacks are more comfortable if you are carrying heavier weights, but are hotter in warm weather. Bumbags come in a variety of styles and sizes and are excellent if you are only carrying a small amount of gear. Many packs will even have a clip for your keys.

- Jacket (dependant on weather /seasonality)
- Hat / gloves (dependant on weather /seasonality)
- Food
- Whistle/map/compass
- 1st Aid kit – a roller bandage and some blister repair items would be recommended as a minimum.
- Vaseline/Silicon Cream
- Emergency money
- Mobile phone – CDMA may be the best if you are away from the metropolitan area.
- Toilet paper
- Equipment for a longer run as a training exercise
- Waterproof bag to keep everything dry

Also, don't forget to have a change of clothes in the car plus water, food and a towel.

What to wear / take on a Longer run

- Backpack – A variety of lightweight backpacks are available. Most are designed to utilize a bladder and most have pockets for water bottles. However, only some allow for water bottles to be accessed with the pack on the back. A 15l to 20l pack would be a suitable size to take on longer events. When putting gear into the pack, it should be placed so important items can be quickly accessed. In particular, food should be readily available and a waterproof jacket should be at the top of the pack. Many packs have storage pockets on the hip belt and these are useful for carrying food ready for quick access.
- Water bottle/bladder

- Waterproof Jacket with hood (dependant on weather /seasonality)
- Overtrousers
- Hat /beanie/ gloves (dependant on weather /seasonality)
- Emergency space blanket/bag
- Food, food and more food / Gels and Powdered drinks
- Spare Clothing – in particular an additional warm top or 2
- Whistle/map/compass
- 1st Aid kit – a roller bandage and some blister repair items would be recommended as a minimum.
- Vaseline/Silicon Cream
- Any required medications
- Emergency money
- Mobile phone – CDMA may be the best if you are away from the metropolitan area.
- EPIRB – desirable if you are by yourself or in a remote location
- Toilet paper
- Torch or headlamp – If you are planning on running after dark, then a headlamp is highly recommended. New LED versions provide both bright lighting and long life at a reasonable price. If you are using non LED lights, then you should also carry spare batteries and bulbs. Small maglites or pulsar lights could suffice if you are not planning to be out during the dark. However, some source of lighting should be taken if there is any chance of being caught out after dark.
- Camera – pack it carefully if it is sensitive to being bounced around or alternately take a disposable camera in a ziplock bag.

Again, don't forget to have a change of clothes in the car plus water, food and a towel. A stove, tent and sleeping bag could also be worthwhile if in a remote location.

Tip - Do not use anything new before or during the run!! Try a long run a few weeks before in exactly the same gear as you will use for the event

What we would wear for the Cradle Run

Shoes

Required characteristics for trail running shoes have been given above. The following is an appraisal of some of the commonly available trail running shoes in Australia.

Salomon XA Pro – very good shoe, good support and comfort, roomy toe front area, but holds foot well; fast lacing system. Disadvantage: not as good grip on loose terrain, particularly for steep downhills; loose around ankle => tendency to slip off foot and to let grit, etc into the shoe; slightly heavy for racing -a lighter alternative is XA series shoe – not reviewed.

Salomon XAPro II – newer, slightly lighter version

Teva Citral - comfortable shoe which holds foot well, not quite as good support as XA Pro and not quite as rigid. Sole has good grip, but not as chunky as most other trail shoes, so struggles in softer muddier conditions, especially when worn. Ingenious lacing system to ensure a snug fit around ankle and to stop grit getting into shoe.

Teva Romero – lighter version, less support

Nike Air Storm Pegasus– Clima fit for running in wet conditions. A comfortable shoe with good grip on sole. Not quite as good support as XA Pro or Citral when in demanding steep conditions where the feet tend to slip a little in the shoe.

La Sportiva Exum Ridge – a rigid shoe with a sticky rubber outsole that is good on rocky surfaces

Montrail – Vitesse, a firm supportive trail shoe with anti pronation role bar and excellent toe box. Flexi plate in the fore foot provides support from stones.

Montrail - Leona Divide, a light weight trail shoe providing good support and grip in either wet or dry conditions, excellent toe box. Lightweight tongue requires attention to lacing so as not to bruise the top of the foot

Montrail – Hurricane – as per the Leona Divide but in Gortex, good for winter running a little hot in summer.

Tips –

- Ensure that you check you adjust your laces just before the run to ensure you're your runners feel snug and not loose.
- Double knot laces and tuck the ends under your cross over lacing to ensure that they do not come undone or snag.
- Feet – toughen up to avoid blisters by walking around barefoot
- Prepare feet properly – trim toenails, remove corns, callouses and rough spots on skin to avoid getting pressure points.

Nutrition

When training hard, it is important to get sufficient nutritious food. Vitamin supplements can be considered if you are in doubt but the normal healthy diet should have sufficient vitamins and minerals for your body's needs. Obviously, the training will mean that you will need an increased calorie intake. This is the good bit where within reason you can eat whatever you want without feeling guilty. After exercising it is important for recovery to intake some carbohydrate so that your body can proceed with its refueling. When stressing your body, you may want to slightly increase the amount of protein you have, but the average diet will have quite sufficient protein for your needs even when training. Be careful to also drink plenty of fluids, especially in hot weather, since the body needs plenty of fluids as part of its recovery process.

Another recommendation is that breakfasts should be the major meal of the day with lunch being the next biggest and dinner the smallest meal of the day. This helps to ensure that your body has plenty of fuel throughout the day for training and dinner then becomes more of a recovery meal rather than a major meal of itself.

What not to eat

At the end of the day eating is a matter of individual preference as a guide what not to eat prior to a run would include, overeating, extreme fatty foods and milk, for some people apples and anything that you have not run tested before.

Pre event

In the week before an event, you should be particularly careful to intake plenty of carbohydrates and fluids. Your nutrition requirements are just the same as when competing in a marathon. The idea is to maximise the amount of glycogen stored in the muscles. A previous theory of carbohydrate loading recommended long duration training

about a week before your event to deplete the muscle glycogen, then to have 2 days of low carbohydrate, high protein diet to continue to starve the muscles of glycogen, followed by 3-4 days of a high carbohydrate diet. The aim was to have the body overcompensate for the glycogen starvation and store extra amounts of glycogen for the raceday. Due to uncertainty of the effect of this procedure, current recommendations are just to continue with a high carbohydrate diet all week. To maximise storage of glycogen, regular meals should be eaten as well as snacks between meals. Also, plenty of fluids need to be drunk. However, there is no need to have a very big carbohydrate meal one or two nights before the event. It is better to ensure that reasonable quantities of carbohydrate are being eaten at regular intervals in the preceding day or two before.

In the morning of an event, it is best to have a large carbohydrate breakfast two to three hours before the event. The pace you will be running at will be much slower than your normal race pace, so this has the benefit that it will be less stressful on your stomach. Thus, it is possible to have a larger breakfast than you normally would before events. Any food that you eat beforehand will be sitting in the tank available for the body to use and also help to extend the muscle glycogen supplies. Liquid carbohydrate foods, such as sustagen, can also be good here to provide the carbohydrate without filling up the stomach with fibre.

Event

During an event, carbohydrate foods are required as well as regular fluid intake. In longer events and especially in hot weather, it may be beneficial to have electrolyte supplements, but normal body stores of electrolytes should last for many hours, particularly when supplemented by foods. Foods to have are often dictated by personal choice and can vary from commercial products to homemade bars and sandwiches to fruit and nuts. They will need to be foods that you enjoy eating, so that they are easily swallowed. They should also carry well in a bouncing pack, but not be so firm that they are hard to eat. They should also withstand hot temperatures well and be sufficiently wrapped to not ruin in wet conditions. If carrying food for many hours, then lightweight dried foods are a major advantage in reducing weight. However, you may find that soft watery foods are more appealing and worth carrying since they are easier/nicer to eat. Food should be packed so that it is easy to get at, but also needs to be packed in a way that carries well.

Low GI carbohydrates (such as – low sugar muesli bars, potatoes and rice), can be an advantage, particularly if eaten early on to result in a slower longer release of energy. However, this isn't so critical since an alternative is just to eat small amounts of high GI foods regularly. However, if eating high GI foods, such as jelly beans, you will need to be careful to keep eating frequently so that glycogen can continue to be supplied to the muscles.

Post event

After an event, it is quite ok to eat whatever appeals to you. Many people find that fatty and salty foods are especially good. As when training, it is good to have some food as soon as possible after finishing to replenish glycogen stores and allow the body to recover. Fluids are especially important – if you have been racing hard, it is generally hard to drink sufficient fluids and the sooner your fluid levels are restored the quicker you will recover. You may also find that your appetite is increased for the next day or two as your body recovers.

Example foods

Pre event

Paul Breakfast – Roll/Honey and Banana / Sports drink water
Nigel Breakfast Weetbix/oats and fruit

During event

- Paul High 5 / Leppin
Sushi rolls/bananas/apples/honey and cheese sandwiches
Staminade powder
- Nigel Muesli Bars/sports bars
Jelly beans or jubes
Watermelon, canteloupe (aid station)
Gels/cordial/sports drink

Tip – always wash Leppins etc down with water. If taking sports drinks on a run dilute them by at least 50%

Post event

- Paul Gatorade/Powerade/Staminade
Laksa soup/noodles and beef
Tinned Mandarins
Smiths salted Potato Chips
- Nigel Toasted Cheese Sandwiches
Fish and chips
Fruit cake
Cordial

Whilst running, it is recommended to try and eat about 1g of carbohydrate per kg body weight, and drink about 300ml of fluid depending on conditions.

During the 80 Km Cradle Mountain run Nigel and Paul generally carry foods as outlined below

Nigel – 8 - 9 hours running

8 muesli bars (25g)

4 sports bars (65g)

4 gels

Eat something at least every hour, but preferably every 30mins, trying to balance out the variety and carbohydrate input.

Tip - put staminade or other drink powders in individual sachets, pre open bars – makes them much easier to access when on the run.

Mountain Running Skills

When running uphill on steep rocky paths, it is necessary to look ahead to pick a line. Steps should be shorter than normal and not attempt to gain too much vertical height in any one step. You should focus each step on finding a position where the next step can be easily made, so as to create a line of steps which can be made with minimal effort and maximum speed. You should also attempt to be as upright as possible looking ahead rather than down at the ground.

When running downhill, it is best to lean forwards as far as possible whilst still remaining in control. This minimises the breaking effect of your legs and you will find you are going faster. When going downhill over slippery surfaces, be aware that your foot may slip and try to look for foot positions that are as firm as possible. When going down rocky paths, you will again need to look well ahead to find a suitable route. This should be a route that minimises the downhill drop in any one step and allows a safe path from one position to the next. If the rocks are large, you will want to step from rock to rock finding surfaces of

the rock that lead you down the slope. Your footsteps will need to be fast and you will need to balance your body carefully to make occasional sharp turns as required. If the surface is slippery, then you will need to take special care to minimise the amount of pressure/traction of any one step. This will mean that you need to take a safer and slower route than if the surface was dry.

Pre run Routine

It is useful to have a set procedure that you follow in the morning just prior to the run.

Nigel

Eat breakfast on wakening

Wash, dress, toilet

Run pack should be packed the previous night

½ prior to start, very easy warm up run followed by stretching.

Paul

Toilet, Shower, Shave

Breakfast and drink,

Pack bedding

Stretch

Put on run gear

Make up sandwiches for the run

Check all contents of run pack

Drink

Adjust runner lacing

Toilet

Stretch

Toilet – part of this is due to pre event nerves, part ois good run planning

Anecdotes

Blisters from bunched socks

Cramping up final hill on Bogong-Hotham

Strong finish on Wilsons Prom run – mentally felt strong and had 12hr time to beat.

Finish of Sydney Trailwalker – beating 13 hrs

Kepler Challenge – tired from racing Southern Traverse, so it was a long final 25km along the river.

Favorite runs from around Australia

Overland Track (Tasmania)

South Coast Walking Track (Tasmania)

An out and back run along the South Coast walking track in SW Tasmania. This is a beautiful wilderness coastal run along beaches and a mostly good condition walking trail. It can be done as a daytime run where you go as far as you have time for and then turn back. Alternatively, you can arrange for a flight into Melaleuca and make it a one way run out. Distance is 80km, so you will want to start as early as possible and take torches. It is also recommended that you take basic sleeping gear (sleeping bag and tent) in case you get caught in bad weather conditions. Even in summer, the weather can change quickly and be quite severe.

Best time is summer with warmer weather and longer days. Access is from Cockle Creek on the SE coast which is 3 hrs drive south from Hobart.

The track is mostly easy to follow but being a wilderness area, you should take a map and compass, and know how to use them. Water is readily available along the track.

Another alternative is to return via the Southern Ranges. However, this is a more serious bushwalking route and should only be attempted by people experienced at walking in the area.

Larapinta Trail (Northern Territory)

Katherine Gorge (Northern Territory)

This is a remote region with amazing waterfalls and beautiful secluded waterholes in the middle of dry desert terrain. A 66km walking trail goes from Katherine Gorge to Edith Falls that is recommended as a 5 day walk. The trail is good quality with only a few rocky areas to slow down progress and is reasonably well marked. A detailed map is not required, but occasional care is required to keep following the track markers. Water is plentiful, but if the weather is hot, you will want to carry at least 2 to 3 litres of water with you. The start and end of the trail are both accessible by sealed road. However, you will need to organise a car shuffle to get back to the start. You may also find that you want to spend extra time looking at the waterfalls and Aboriginal art sites. The best time of year to go is in winter which is the dry season and coolest, but the trail can be done at any time of year.

Cape to Cape (Western Australia)

Jagungal Wilderness Run (New South Wales)

A 70km run through Kosciusko National Park over Mt Jagungal. A tough run with long steep climbs and descents, but through beautiful alpine scenery. The path follows walking trails for most of the way and is of mixed quality.

Lamington NP (Glasshouse Mountains/ Misty Mountains Trail) (Queensland)

A World Heritage area of tropical and temperate rainforest with an incredible variety of wildlife. Many good quality walking tracks exist and these can be combined into as long a run as you want. Access from either of the two picnic areas: Binna Burra or Green Mountains. Tracks are good quality and mostly not too steep. Water, toilets and BBQs are available at the picnic areas and water is available along the tracks. The tracks are well signposted but a map should be carried. Some possible runs to do are:

Wilsons Promontory (Victoria)

Surf Coast Trail (Victoria)

Razorback/Mt Hotham (Victoria)

Churchill National Park (Victoria)

Howqua River trail (Victoria)

A scenic walking trail along the Howqua River in the Alpine National Park. To run the complete length to the final road access point near Lake Eildon is 65km, but portions of this trail can easily be run. Also, the run can easily be extended along fire trails and made into a circuit. The trail is good quality with steps and undulations at points, but is an easy surface to run on. Signs along the way are good, but at points it can be hard to follow the correct track along the river. A good map will help for this, see Rooftops "Howqua- Lake Eildon" map. The access is along a slow dirt road about 3.5 hours drive from Melbourne. Water is available in the river but can be of dubious quality, so it is recommended to either purify it or carry your own supplies.

Other good trail running locations

Ballarat- Bendigo - eg Tipperary Trail part of the Great Dividing Range Walking Trail
Blue Mountains, Royal NP, Ku-ring-gai Chase NP
Croajingalong, Grampians, Gembrook, Alpine NP (Lake Tali Karng)
Heysen trail, Bibbulmun track
Any wilderness/bushwalking area.or long distance walking trail.

Websites

<http://www.ultraoz.com> – information on Australian ultrarunning – look through the calendar for ultra trail runs that you may be interested in.

100milers

<http://www.run100s.com/> - an American site on ultra running, focussed on the 33 100mile trail runs in America.

www.bushwalking.org.au

www.galactic.net.au

www.aussie.net.au

www.parks.vic.gov.au

Safety Tips

- Plan your run properly, take a map and compass if you have any doubts on the route.
- Take adequate clothing, food and water.
- Inform someone of where you are going and when you will return.
- Allow plenty of time – allow for shorter options if it takes longer than planned.
- If in doubt, try a shorter route and then build up.
- Revise your first aid skills
- Join Ambulance Victoria or have medical insurance that covers transport to hospital
- Practise your navigation.

Bush code

- Discard of rubbish only in bins or preferably take it home with you.
- Leave plants and flowers undisturbed.
- Don't feed native animals or leave food around.
- Keep to the tracks where possible.
- Give way to walkers on the tracks.
- If a toilet is not available, dig a 15cm deep hole at least 100m away from camps, tracks and watercourses and bury waste and toilet paper.

Running the Overland track the Hard way

(by Paul Ashton)

Well, another Cradle Run is over - Thank Goodness. It should have been a great run but it was hard, unbelievably hard, the hardest run I have ever done. After recovering from 9 stitches above the ankle - 2 weeks of no exercise, and strained calf muscles - 2 months only limited running, I slowly found out that I wasn't as strong, physically as I thought I was. In perfect conditions, 32 veteran and new Cradle runners started the 85 Km Overland Trail from Cradle Mountain to Lake Saint Clair in the highlands of Tasmania. This was to be my sixth run along the track and I thought I knew it pretty well and the challenges it offered. What I forgot was how mud and wet rocks and tree roots can affect how easily you run and drain you of energy, straining already tired muscles.

Equipment problems plagued me from the start. I had changed running socks and forgotten to adjust my laces, as a result it felt like I was running in gum boots and it wasn't until I had been on the trail for nearly an hour, that I tightened them properly or so I thought, in fact I over tightened one and suffered pain from the laces for 9 hours before I got assistance at an aid station in rethreading the lace. By then the damage was done and I suffered a bruised and swollen foot masking the pain with pain killers at three hourly intervals. But with laces tightened I flew, relatively speaking for the next 3.5 hours along the trails past stunning alpine scenery to Pelion Gap, on target for a 12.5 hour finish. I was stoked. What I didn't realize was I was also about to hit the wall, Coming out of Pelion is a one hour climb and I struggled to maintain my form, my legs felt weak on the uphill forcing me to walk and on the down hills I was too weak to be able to run fast for fear of slipping and stumbling on loose and wet rocks. But worse was to come. By the time I passed the hut at Windy Ridge, 8 hours into the run I was having to force myself to run the flats and downhills. I was drained physically and it was a battle of mind over body. My motto was "maintain forward momentum. Do NOT stop." I crawled along at snails pace, Sushi rolls, Carbo Shots, did nothing, my mouth was so dry I had to wash the rice down with water in order to swallow, and this was my fun weekend!!

As I approached Narcissus and the aid station I passed my 4th deadly Tiger snake and let go another expletive, it is amazing how snakes have the ability to make you refocus your attention, as do falls I tripped and fell four times during the run but my Montrail runners protected my feet brilliantly. Now was the time to increase my speed. My plan was to get to the aid station and collapse for 10 minutes, refuel and push on to Cynthia Bay, 20 Km away. I surged along the duckboards and felt that I was in runners heaven, crossing the swing bridge, I accelerated (still not too fast) and rounded a corner to see the Angels of Mercy waiting for me - a chair, coke, fruit, chocolate, "can we take off your shoes, can we take your rubbish", nothing was too much for these wonderful people who tended every runner, providing, comfort and strength to tired bodies and weary minds. I had struggled running alone for 8.45 out of 9.45 hours and I was now in heaven. After a 10 minute break I felt recharged, put on clean sox, a little luxury and runners and headed into the wilderness again, only stopping to apply Vaseline to areas that you don't know can get sore unless you've already been there.

I ploughed into the thick rain forest, suddenly I felt like a hunted man - big Ras Simpson a monster of a man who walks almost as fast as I can run was on my tail and every time I slowed down I could hear him bearing down on me. I set myself my second challenge, not only would I finish this run in less than 13.5 hours but I would stay ahead of Ras. It was hard, so hard but eventually I pulled away and wandered through the forest a solitary individual alone with thoughts committed only to achieving a goal. A goal that as time passed looked increasingly difficult. I tried to eat but Banana made me feel nauseas,

strength bars tasted like boot leather so I slugged down some carbo shot and water and toughed it out. All of a sudden I was at Waters Meets and it was only 10 minutes to the finish. I accelerated as much as I could up another damned hill. The end was close, but the hill continued, remember after 85km it doesn't have to be big to be seen as a hill. I surged and flagged, "walk for 60 seconds, get your breath back and then run again", I did, rounding the corner I saw the finish, a cry went up, " Runner Coming' I surged, they yelled, I felt elated and sprinted to the finish and hit the stop button at 13.27, one hour latter than my plan. I had conquered my physical weakness - just. I had conquered my mind and the trail had let me complete a journey of pleasure and pain a journey of mental disciple and survival through some of the most stunning Alpine scenery in Australia, a journey that only a few are privileged to be able to complete and grow from.

My lovely Carole was there at the finish as she has been for 4 of my previous runs, and supported me as I stood totally drained of energy (see picture). A hug, then into a bottle of Powerade and a packet of chips. It was over for another year and already I was working on a program that would allow me to run again in 2005 and hopefully get under 12 hours.

Till next year.