

# NOURISH YOUR BODY

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## **2. NOURISH YOUR BODY COASTREK PLAN & TRAIN E-BOOK BY WILD WOMEN ON TOP**



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Coastrekker!

Nutrition for Coastrek is all about finding  
what works best for you! So practice,  
practice! If you didn't try it in training don't  
try it during the event.





# TOP NUTRITION TIPS

- For best results in an endurance trek, training is paramount. Good nutrition can improve performance but is not a substitute for appropriate Trek Training.
- You need to listen to your own body and do what works for you. Try different things in training and if you learn in training that you can't eat much, then don't force food in. Eat little bits often as you walk.
- The biggest change in your schedule during the week before your event should be in your training, not in your food. Don't be tempted to do any last-minute long sessions! You need to taper your training so that your muscles have adequate time to become fully fuelled (and healed). Allow at least two rest days pre-event.
- You don't need to eat lots more calories in the week before the event. You simply need to exercise less. This way, the 600 to 1,000 calories you generally expend during training can be used to fuel your muscles.
- Lots of the normal rules about healthy eating go out the window during such long events because you need easily absorbed low-fibre carbohydrates to provide quick energy for working muscles AND some protein.
- Avoid Nurofen or Nurofen Plus during the event. It can cause nausea which could prevent you from walking. Use another pain killer or use only after a meal if possible.





# FUEL FOR WALKING

Your body has two primary fuel sources – fat and carbohydrate. Think of fat as the slow burning fuel. It takes time to burn and needs oxygen. That's why fat is no good at fuelling fast, explosive exercise, but because it is such a compact energy-dense store even if you are quite lean you will have ample fat stores to keep you going for a long time. However we can't burn fat alone. The brain, red blood cells and some other cells around the body preferentially use glucose. That's why it is so important for your body to keep blood glucose at a nice steady level. Your muscles use both fat and glucose, and when you are walking the amount of each will vary depending on how hard you are working and

how long you have been going. The point to remember is that while fat is not limited, glucose (carbohydrate) certainly is. Your challenge during the event is therefore to maintain glucose levels. You cannot store enough in your body so you will have to consume carbohydrate along the way at the right rate, otherwise you won't be able to keep up the pace and may not be able to finish.

I had one walker tell me her trainer had advised consuming hard-boiled eggs and nuts through the event. This sort of approach would be disastrous during a long endurance event. These foods contain no carbohydrate and will not help you to keep your energy levels up. Remember you are not short of fat –

body fat will be broken down to supply fatty acids as fuel. It is glucose that is the limiting factor. Your liver stores some glucose as glycogen, and there are also small stores in your muscles, particularly in trained muscles. These glycogen stores will get you through the first couple of hours of the walk at least, maybe more if you are moving slowly, but the faster you walk or run, the more glucose you are using (and more energy overall so you will be burning more fat). It is imperative that you start to take on board carbohydrate from your food within those first few hours. If you delay then you risk not being able to keep up with demand and your blood glucose can fall. When this happens and glycogen

stores are depleted, you 'hit the wall'. You might feel weak, nauseous, and fuzzy in the head because your brain relies on glucose for energy. If you're not eating and drinking enough, you might also get increased blood acidity (acidosis) from the increase in lactic acid and/or protein breakdown. This is really serious and must be avoided. If you can see a team member starting to get confused and disoriented, stop, eat some quickly absorbed carbohydrates (e.g. a sports carbohydrate gel) and rest as soon as possible. You can't continue through this stage - you need to rest and take care of each other.





# ENERGISE YOUR TREK

You want to start the event with full glycogen stores. All you need do to achieve this is to taper your exercise for the few days leading up to event day, and maintain a high carbohydrate diet during that time. This is sometimes called carbohydrate loading. Some strategies recommend a really high carb intake of up to 12g of carbohydrates per kilo of body weight per day. But that can be really difficult for many, particularly for those of you who may be a little 'carbophobic' given current dietary trends for weight control.

Do remember that what you do for a long endurance event is completely different to what you may do for day-to-day health and wellbeing. Your goal for these couple of days is to fuel your body. This carbohydrate will not turn to fat in your body – this only happens if your glycogen stores are already full, you're not burning energy and your

body is forced to convert the carbs to fat for storage. That said neither do you want to start the race feeling bloated and overfed! So be sensible and listen to your body. I suggest aiming to include a good portion of a carb-rich food at each meal and aim for 6-8g of carbohydrate per kg. For a 60kg woman this means 360-480g of carbohydrate a day. With the taper in training and adequate rest, this will ensure you start the event with a full fuel tank.

Don't worry if you gain a couple of kilos in these last few days. This is not extra fat, it's reflective of the stored glycogen and so it is a good thing! Glycogen is stored with water and is therefore a bulky heavy fuel (hence we can't store too much of it). As the glycogen is broken down this water is released for use by the body – a brilliant system when you think about it!





# TO CARB OR NOT TO CARB?

During normal training you want to ensure a good fibre intake and concentrate on mostly low GI carbohydrates. These promote good gut health, assist with appetite control, keep blood glucose and insulin levels steady and help to keep you lean (or get lean if you're also seeking to lose some body fat). You also want to ensure a good protein intake to optimise muscle repair and recovery, as well as help manage your appetite. Include a protein-rich food at each meal.

During the event, however, these rules are not applicable. Fat, fibre and protein all slow stomach emptying and so you do not want too much of these things, otherwise you're likely to feel nauseous.

During Coastrek you want to consume a regular intake of easily digested, quick to leave the stomach carbohydrates. Your best choices are low fibre and low fat. Good examples include compact high carb foods like specially formulated high-carb sports bars, lollies

/ jellies, sports drinks, jam or honey sandwich on white bread, pasta, rice, and potatoes.

It may feel very odd to be consuming the kinds of foods you usually avoid such as white bread, but your goals on event day are different. You need to get on board enough carbohydrate and fibre, nutrients and so on are not the priority. They will be in your post-event recovery, but on the day your focus is on topping up your fuel tanks and keeping a trickle of glucose constantly

entering your blood stream.

It can be hard to eat the increased carbohydrates – some people manage best with muffins, crumpets or finger buns. Consuming high fat foods, i.e. pizza, fried foods, etc. will not assist your nutritional preparation and you will gain fat (and you don't want to be carrying that for 60km!). So, resist the temptation to indulge in high fat foods.



# PRE-EVENT NUTRITION

With an early morning start it's crucial that you eat a high carbohydrate meal the night before. A big bowl of pasta or risotto (without too much cream or butter to keep the kilojoules down, and be sure to add some chicken or seafood for protein) is ideal.

In the morning have a bowl of porridge or cereal. When I did the 100km Sydney Coastrek in 2013, we made a Bircher Muesli by soaking oats and dried fruit in milk overnight, then adding some nuts and seeds, fresh fruit and yoghurt in the morning. It was easy to eat, delicious and helped us start the event feeling energised and ready to go.

You might like to also have a B group complex supplement as B vitamins are required for the metabolic processes that convert carbs into energy. One that you dissolve in water has the advantage of topping up your hydration levels at the same time.





# DURING THE EVENT NUTRITION

Remember, trekking 30 or 60kms is not the time to focus on gourmet cuisine or big meals. Think of your body as a high performance machine requiring high performance nutrition. Ensure that you maximise your performance with small nutritional mouthfuls often. Getting your nutrition right during the event will greatly improve your chances of success.

The AIS recommends 30-60 g of carbohydrates per hour during endurance events for maximum performance.

## Here's what 50g of Carbohydrates represents:

- 800-1000ml sports drink (sugar ones)
- 2 carbohydrate gels – GU, Endura, etc.
- 2 bananas
- 1-2 cereal bars (these vary widely-

check the labels on your preferred ones). Sports bars are usually a better choice as they have 40+g of carbohydrate per bar, compared to only 20g or so in most regular cereal bars.

- 800ml cordial
- 500ml juice
- 50g jellybeans or jelly lollies
- 1 jam or honey sandwich

Experiment in training and eat what you're comfortable with but make sure you average at least 30g of carbohydrate an hour, depending on how fast you're travelling. If you're jogging the distance, your energy requirements will be different from if you're strolling. Jogging will use up a higher amount of carbohydrates and you will need to up your intake.





# DURING THE EVENT NUTRITION

**Energy gels:** Energy gels are great for some people but be careful with them – the serving size is for a 70kg male and in some people they can trigger diarrhoea by drawing water into the gut. You may not need them if you can manage to eat small quantities of food often, but experiment with them in training for best results and ensure you drink every time you use them.

We found the gels to be extremely useful particularly later in the event, when we really didn't feel like eating. Test them in training to find a brand you can easily open and like the taste of.

Try leaving them till the last third of the event and have small mouthfuls out of the brands in tubes such as Peak Fuel. Again, the reaction to gels is really personal so do what you know works from your own experience.

**Hydration:** It is very important to “listen” to your thirst and to drink water or diluted sports drinks regularly. Most people prefer bladders or CamelBak® because they are convenient and easy to sip from.

If you're not urinating or your urine is dark yellow, you may be dehydrated. As a rough guide you should be urinating at least every couple of hours.

If your urine is completely clear, you might be drinking too much. You might also find you are urinating frequently, almost as if you have a UTI. This is a sign that you need electrolytes. It's easy to overhydrate during an endurance event and can be extremely dangerous. Overloading your body with water dilutes electrolytes in your bloodstream – called Hyponatraemia (low blood sodium) - and your blood pressure can fall.





# DURING THE EVENT NUTRITION

**Electrolytes:** If it's hot and you are sweating profusely, you are losing electrolytes, and drinking an electrolyte formula such as Hydralyte Sports is advisable. We carried a CamelBak® filled with water and then a water bottle that we filled with Hydralyte Sports. This comes in sachets that you mix with water according to the instructions. A 600ml water bottle is great for the electrolyte mix, while keeping the bladder (CamelBak®) for plain water – much easier to clean! Note that Sports Gels have nearly

no sodium and so therefore do not contribute to your electrolyte replacement.

Sports drinks have varying formulations with amounts of sugar and sodium, however the higher sugar ones are focused on maximising the carbohydrate intake rather than for optimal hydration.

**Sodium:** Sodium is the most important electrolyte, so it's recommended to have something salty – salted nuts, pretzels, Vita Wheat biscuits, whatever you can stomach. These are very dry foods and you may not find them the easiest to eat. A vegemite sandwich is another great idea.

Soup as the main meal is great way to get some salt, as well as fluid, carbs and protein. Have your support crew meet you at somewhere around the half way mark with a good meal such as soup

and sandwiches. This will help bolster your mood and energy levels too.

Salt Tablets (600mg of sodium chloride) may assist. One per 10-15km is recommended BUT consult your pharmacist and try in training. I would only do this if you don't like or cannot tolerate an electrolyte drink and you are sweating profusely. If it's not a hot day electrolyte replacement will not be as great a concern and you will achieve it easily from food.





# DURING THE EVENT NUTRITION

**Caffeine:** Caffeine has been proven to help with muscle fatigue as well as general blariness but in some people it can cause upset stomachs.

You can try products, other than coffee, like Red Bull, V, or Mother in training, however use in moderation and read the labels. They can be very strong on an empty stomach and could cause adverse reactions. Energy drinks such as these also have a very high sugar content which may make you feel a bit queasy as they pull water into the gut before absorption.

I prefer to use caffeine gels but again be judicious in your use of these and save them for when you really need a lift. As with all of these nutrition strategies it is best to practice them in training so that you know what your gut can cope with. There is also evidence to suggest you can train your gut to cope with the amount

of carbohydrate and other products ingested such as caffeine.

**Team care:** Keep an eye on your teammates and make sure everyone is eating. Try to nibble small snacks every hour.

If you notice someone isn't eating, or is struggling, or has gone quiet, start talking to them early - encourage them a little to eat, even if they resist. Have some snakes or jelly beans handy just in case.

A timely red frog, hot sweet black coffee or Red Bull, coaxed down a reluctant-to-drink, nauseous, flagging trekker has been known to save the day.

Begin drinking early - remind each other often and start drinking well before you get thirsty.



# POST-EVENT NUTRITION

Rest and hydration are best for your post-event and post-endurance recovery.

And how good is this? Research shows that chocolate milk (you can have it cold or as hot chocolate) contains a perfect ratio of carbohydrates to protein, provides essential vitamins and minerals, rehydrates you and it tastes good. It's a great option to have at the finish line or when you get home.

For the next few days you need plenty of protein for muscle repair and recovery, and you should now move back to your usual high fibre, low GI carb foods. Watch your alcohol intake as it can slow muscle repair. And try and get good quality sleep!

*Note:* This guide is intended for fit healthy trekkers. If you have diabetes, or have impaired glucose tolerance, you need to seek medical advice. For more specific information you may like to visit a sports dietitian.





