

NUTRITION ADVICE FOR THE ROTTNEST CHANNEL SWIM 2005

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You've done the training, you are feeling positive, you've got good support and now you are ready for a great swim. The icing on the cake, so to speak, is to prepare well nutritionally. The two most important nutritional factors that will allow you to perform at your absolute best in the Rottneest Channel Swim are to make sure you:

- eat enough carbohydrates to fuel your swim and
- drink enough fluids to prevent dehydration.

If you get enough of these two things, research shows you can expect a **10-15% improvement in your performance** and perhaps even more importantly, you'll feel better during and after the race.

WHAT TO DO THE DAY BEFORE

Carbohydrate loading will mean you will increase your muscle stores of carbohydrate so that you have more fuel to burn during the race. This is extremely important for **solo swimmers**. I suggest a modified form of carbo loading where you aim to eat (or drink) 8-10g of carbohydrate per kilo of your body weight , on the day before the race (ie 560-700g for a 70kg swimmer). Men should aim for the upper end of this range, and women the lower. If you are not used to eating this amount of carbohydrates, then it is best to trial this before the race. To get the amount of carbohydrate you need , you will need to:

Make carbohydrate foods the basis of all your meals

- ★ Bread, crumpets, toasted muffins
- ★ breakfast cereals, breakfast bars, tinned spaghetti, baked beans
- ★ pasta, noodle and rice dishes
- ★ some vegetables, such as potato, corn and sweet potato (most vegetables contain very little carbohydrate)



Drink carbohydrate containing fluids during the day and with meals

- ★ fruit juice, sports drinks, milk shakes, smoothies, flavoured milk, sustagen

Eat carbohydrate rich snacks (or drink carbo drinks) through out the day

- ★ muesli bars, sports bars, muffins, scones, fruit toast, yoghurt, fruit, lollies

SAMPLE MODIFIED CARBO LOADING PLAN (~600g)

Breakfast:

1 1/2 cups Sustain	75g
1 cup milk	15g
2 slices wholemeal toast with jam	40g
Glass of OJ	30g

Midmorning snack:

Banana	20g
muesli bar	25g

Lunch:

1 large chicken & salad roll	50g
600ml Powerade	50g

Mid afternoon:

Smoothie/milkshake	45g
50g soft lollies	40g

Dinner:

2 cups cooked pasta or rice with sauce of choice	100g
1 cup canned fruit	25g
1 can coke	50g

Snack:

200g low fat fruit yoghurt	35g
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TOTAL 600g

NB: Aim to drink 3-4L of fluids (in total) the day before the race and avoid diuretics such as alcohol and excessive caffeine to make certain you wake up race day in a well hydrated state. If you struggle to eat this quantity of food, try drinking extra carbohydrate containing drinks, or use high carb supplements such as carboshotz when carbo loading. The use of lollies & even sugar is useful as a compact way of getting extra carbs

WHAT TO DO ON RACE DAY

Never try any new foods or drinks on race day. **Practice eating and drinking strategies during training or in other swims if possible.**

BEFORE YOU START

The pre-event meal is used to top up fuel & fluid levels, to prevent hunger during the race and to help you feel ready and confident. What you should eat should be **easy to digest**, high in carbohydrate, low in fat, familiar to you and enjoyable. This meal or snack needs to contain 1-2g of carbohydrate per kg of your body weight. I suggest you work out how much carbohydrate you need eg 70-140g for a 70kg person and then look at nutrition labels for information on the carbohydrate content of the foods you plan to eat. Some suggestions include:

- ★ Your favourite breakfast cereal with skim milk or low fat milk
- ★ Muffins, toast or crumpets with honey or jam and a glass of orange juice.
- ★ Rice or pasta with low fat topping
- ★ Tinned spaghetti on toast
- ★ Pancakes and maple syrup
- ★ Liquid Meal Supplements eg sustagen, Sports drinks or smoothies (useful for those who get nervous)

The timing

It is important that the timing of the meal is practical, right for your stomach, not too close to the race or too far away. 2-3 hours for a larger meal will suit most people or 1-2 hours if you are having a smaller meal or snack. I know of some swimmers who get up very early, eat their breakfast and go back to sleep for an extra hour, so that they are adequately fuelled for their race. Others can only tolerate a sports drink and a carboshot an hour before they start. Remember everybody is different and you'll know what will work best for you.

What about nerves?

Anxiety and nerves slow the rate at which the stomach empties, so allow more time for food to digest or eat less than normal. If this likely to be a problem for you, try liquid meals such as a smoothie or sustagen, or low fibre foods such as white toast or cornflakes. Fruit, fruit juice and

milk may not be tolerated by those who are nervous. Having a sports drink such as Powerade or Gatorade, with your breakfast is a good idea if you can't eat much because you are nervous.

DURING THE SWIM

CARBOHYDRATES

Studies show that 30-60g of carbs per hour is needed during continuous exercise to delay fatigue and improve performance. Men tend to need more and should aim for the upper end of the range, while women can aim for the lower end. This is equivalent to

- 500-1000mls sports drink (check the carb content of your sports drink)
- 15-30 soft lollies
- 1-2 carboshotz
- a jam/honey sandwich (white bread)
- 1-2 muesli bars/ fruit bars/ breakfast bars

Solo swimmers

Sports drinks are easier to digest and have the added advantage of containing fluid as well as carbs. Foods that are low in fat and fibre are the easiest to digest. Examples include lollies, white bread sandwiches, plain cereal bars eg LCM's and muesli bars and crackers. . Small amounts frequently, tend to be better tolerated than larger amounts. High carb supplements like carboshotz can be useful but are best trialled as they do not agree with everybody. Remember you'll be in the water either treading water or laying on your back whilst you eat or drink. This is quite a difficult thing to do and requires plenty of practice. Taste fatigue (or a salty mouth) is often a problem so try to have some variety. For example, a peeled orange quarter, a small piece of banana or a small plain sweet biscuit will give your mouth a break from the sports drink, lollies and carboshotz..

Team/Duo swimmers

Because you are not swimming continuously, your carbohydrate requirements are not as great as solo swimmers, but remember you will still benefit from taking in some carbohydrate. The amount will depend on how much you plan to swim. Aim to ingest 15-30g of carbohydrate for every 30 minutes of continuous swimming.

FLUIDS

Dehydration (even mild) will affect how well you are able to swim and how well you feel during the race (particularly in the latter stages) The amount of fluid you need will depend on your sweat rate and everyone sweats at different rates. If you are typically a “sweater” you will need more fluid to prevent dehydration.

- ★ Know your sweat rate. If possible, weigh yourself before and after a long training session (and record fluid intake) to estimate your actual sweat rate. If you do not know your sweat rate, most people will sweat 500-1000mls during continuous exercise
- ★ Drinking **early in the race** is a very important strategy in preventing dehydration. Fluids are not well absorbed if you drink when you are already dehydrated, so I strongly advice you to pay the most attention to your fluid needs **early on the race**. Include fluids in your pre event meal and sip fluids during the morning before you start
- ★ Aim to drink 300ml in the 15-30 minutes before you start
- ★ Plan to drink at least 125-250mls for every 20-30 minutes of continuous swimming
- ★ Sports drinks (5-8% cho) have the advantage of containing carbohydrates as well as electrolytes and have been shown to boost performance. So drink mainly sports drinks

Solo Swimmers

It will be almost impossible to replace all of your sweat losses during a solo swim, however minimizing dehydration should be a goal. . Aim to drink at least half of what you think you will sweat. Drinking early in the race is a **very important strategy** for solo swimmers

What if you get sea sickness?

Many solo, duo and team swimmers complete the Rottnest Channel Swim every year even if they can not eat or drink because they are suffering from sea sickness and may even vomit. However, research tells us if you can manage something you'll make it sooner and will feel better. Have a nutrition and fluid plan for your race, however if you are not able to eat and drink to this plan, be confident that you will still be able to complete the event.

RECOVERY

An event like the Rottnest swim is very physically demanding. There are specific nutrition and fluid strategies recommended to ensure your best recovery. They are to take some form of carbohydrate and protein as close to finishing the race as is practical and to rehydrate fully.

Drinking

- ★ You will need to drink at least 150% more than the amount of fluid you have lost. This is because your body can not absorb all that you drink. A good way of knowing how much fluid you need to drink is by knowing how much weight you lose during the swim by weighing yourself before and after. If you have lost 2 kilo's, you will need to drink at least 3L to fully rehydrate.
- ★ Sports drinks are retained by the body better and are recommended, particularly initially. It is best to start immediately after the race, and realize that it may take 24 or more hours to fully hydrate. Sports Drinks also contain carbohydrates which will assist your recovery.
- ★ Drinking alcohol is not recommended until you are well hydrated and have had something to eat. Alcohol interferes with the recovery process.

Eating

It is recommended you consume 1-2g of carbohydrate per kilogram of your body weight (50-100g for most people) and 10-20g of protein as soon as is practical after the race. Some suggestions are:

- ★ Sustagen + 600mls Sports Drink
- ★ 600mls Sports Drink + chicken sandwich
- ★ Powerbar (or other sports bars) + can of soft drink or sports drink
- ★ Ham and cheese sandwich + 300mls of fruit juice
- ★ 600mls flavoured milk + handful of dried fruit and nuts / lollies
- ★ 2 pieces of fruit and a sustagen
- ★ Muesli bar + 600mls of flavoured milk
- ★ Carboshot (if you can stand having another one!) + milkshake/smoothie