



Fuelling Fitness for Your Sport- Swimming

About Swimming

Swimmers typically train 2 times per day, including a morning and afternoon session, spending up to six hours per day. Each session can range from 2-10km depending on the phase of training. Swimming is a highly anaerobic sport, with aerobic metabolism increasing with race distance. Races can last between 20 seconds to 15 minutes. Many swimmers are required to race 2 or more times in one day.

Training Diet

A high energy, high carbohydrate diet is required for swimmers to support the high-energy demands of training. As swimmers are usually training twice per day, high carbohydrate snacks and drinks are essential to aid recovery. Swimmers with high-energy requirements need to increase the number of snacks during the day and make use of energy dense foods.

Fluid Needs

- Most swimmers require at least 2-3 litres per day. On hot days, sweat losses can be significant, especially when training in the sun.
- Swimmers can assess how much fluid they lose during a training session by weighing themselves pre and post training. For each kilogram lost, one and a half litre of fluid needs to be replaced.
- Sports drinks are suitable fluids during long training sessions as they contain carbohydrates and electrolytes along with fluid.
- Warning signs of dehydration include dizziness and light-headedness, muscle cramps, nausea, headaches, dark urine, dry mouth and feeling of extreme heat.

What Should I Eat Pre-Event?

1. Low fat, high carbohydrate meals 2-4 hours prior to the event along with plenty of fluid.
2. A small snack such as a muesli bar, fruit or dried fruit can be eaten about an hour prior to the race.
3. Examples of pre race meals include:
 - Cereal with low fat milk and a piece of fruit
 - Pancake with syrup and a glass of juice
 - Liquid meals such as Sustagen Sport or a smoothie
 - Sandwiches with low fat fillings
 - Pasta, rice or noodle based meals.

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What Should I Eat/Drink During Competition?

Between events swimmers can refuel by including some high carbohydrate snacks and drinks.

- **Less than 30 minutes between races:** fluids, sports drinks, juices, glucose lollies, fruit
- **30-60 minutes between races:** bread with honey/jam/banana, sports bars, cereal bars or low fat muesli bars
- **1-2 hours between races:** pasta, rice or noodle based dishes with low fat sauce/toppings sandwiches or rolls
- **More than 2 hour between races:** a more substantial meal or meal replacement.

What About Recovery?

As swimmers are usually training twice per day, a recovery snack straight after each training is essential to help refuel the muscles for the following training session. Sports drinks, lollies, fruit, muesli bars, sandwiches and low fat muffins are all great foods for recovery and should be eaten within 30 minutes of a training session or race. Following this a more substantial meal containing both carbohydrates and protein is required.

Other Nutrition Tips

- Before training it is suggested to eat a Breakfast bar, a piece of fruit and a glass of orange juice + a sports drink during training, then followed by breakfast (as suggested above) after the training session.
- Swimmers are often eating in the car on the way to and from training. It is important for swimmers to be organised and pack suitable foods and drinks with them for pre and post training.
- Do not rely on the foods available at the venue as they may not be appropriate for recovery.
- Many female swimmers can struggle to maintain low body fat levels. Athletes watching their body fat levels should follow a low fat diet maximise performance and promote long-term good health.
- Swimmers tapering their training before a competition may need to reduce food intake to avoid unwanted gains in body fat.
- A multivitamin/mineral supplement may be useful in hard training or when travelling to compete. If you require more information about nutrition supplements, contact a sports dietitian in your state [Find a Sports Dietitian](#).

How to Get Involved

Click on the link to find out more about swimming in Australia and how to get involved.

www.swimming.org.au

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