



During swimming, the body uses energy, and the level of intensity of the training determines where the energy comes from.

In low intensity work such as a steady swim, fat is the main source of energy, which is released into the body gradually. As exercise becomes more intensive, the energy in the fat can't be released quickly enough and as carbohydrates can be converted into energy much more quickly, the swimmer will rely more and more on carbohydrates and less and less on fats.

Unfortunately, the body can't store lots of carbohydrate with the result that between 60 to 90 minutes of intensive training can use up most of it – and depletion then leads to fatigue. If the swimmer has the wrong intake of food levels, he or she will reach a stage of being unable to cope with the training load.

Although fats are still important in providing energy, since most training sessions contain a large proportion of medium and high intensity work, swimmers require much more carbohydrate in their diet than the average person.

Carbohydrates come in two forms, simple (sugars) and complex (starches). Sugar as a fuel is like a firework; a "big bang" of energy and then nothing else. Complex carbohydrates are similar to coal, burning slowly over a longer period of time.

A mixture of the two carbohydrate forms is required though the majority should be the starchy unrefined complex carbohydrates such as whole grain cereals and cereal products (i.e. wholemeal bread, muesli, rice, past, potatoes etc), beans peas and lentils. These foods also contain protein, vitamins and minerals and have high fibre content. You shouldn't rely on simple carbohydrates such as sweets, junk food and sugar to provide the carbohydrate in your diet! **Remember - the pasta you eat the night before a competition will have a much greater and longer lasting effect than a chocolate bar on the day!!**

The night before competition

Stick to high carbohydrate; low fat meals with plenty of liquids (fruit juice, cordial, water). Do not try to stock up and over eat to the point of discomfort. Just stick to a normal size meal. Some suggestions are:

- Noodles
- Rice or Pasta (low fat sauce)
- Deep Pan Pizza (but avoid fatty meats)
- Beans on Toast
- Potatoes in any form EXCEPT CHIPS!
- Cereals

Pre-competition

NEVER go without food or drink.

The timing of your meal depends on when the competition starts, but you should aim to finish your meal at least 2-3 hours before the competition starts. The meal should be high in carbohydrate and low in fat and protein. You should also take plenty of fluid in the form of fruit juice, water, cordial or isotonic sport drink but not to the level of discomfort. Drinking small amounts often is the key, up to the start of the race. **Don't forget to carry your drinks bottle at all times and use it!**

Some suggestions:

- Rice / Pasta / Noodles
- Toast with marmalade, honey or jam
- Breakfast cereals
- Muffins, crumpets, currant buns, scones, teacakes, raisin bread
- Scotch pancakes with a banana
- Banana sandwiches
- Beans on toast
- Toasted sandwiches
- Pizza (thick base)
- Jacket potato



Snacks for competition and after training

- Sandwiches (try thickly cut bread with banana/jam/honey)
- Baguettes / rolls / pitta bread
- Muesli bars and dried fruit bars
- Popcorn
- Fresh / dried / canned fruit
- Cereals
- Currant buns / tea cakes / malt loaf / raisin bread
- Sesame snacks / sticks
- Fruit cake
- Plain type biscuits e.g. Rich Tea, Digestive, Garibaldi, Fig Rolls, Jaffa cakes
- Jelly cubes
- Scones / muffins / crumpets
- Toast
- Carton low fat rice pudding
- Low fat fruit yoghurts
- Crispbreads / rice cakes / crackers
- Slice of pizza (thick base)
- Bread pudding / cheese buns / Scotch pancakes
- Drinks – Juices / squash / Sports drinks

Eating between races

The time you have between races will determine what you can eat. With only one hour before your race, your carbohydrates will need to be refuelled by isotonic sports drinks, juices or squash.

With more than an hour between races, you can have a high carbohydrate snack from the list above. On the day of competition, you will probably eat more 'snack' type foods during the day but you should resume your regular meals after competition.

You should try to avoid fatty or sugary snacks such as chocolate bars on the day of competition.

After competition

We all know what it's like after you have finished; you want to head for the nearest fish and chip shop or burger bar! If your events are finished and you aren't swimming the next day – go for it! **You deserve it!**

However, if you are swimming again next day, try to avoid the temptation, as it is vital to refuel and rehydrate ready for tomorrow. Start drinking straight after the competition and have a high carbohydrate snack as soon as possible, followed by a low fat meal later. This also applies after hard training.

Some suggestions for post-competition meals:

- Chinese meals with lots of noodles
- Pizza or pasta dishes with tomato-based sauce
- Chicken kebab with pitta bread and salad
- Jacket potato and salad fillings
- Indian food with rice and breads.

Fluid

Dehydration can also affect physical performance and will prevent you from doing your best. **It is important to drink before you feel thirsty. If you feel thirsty, you are already dehydrated.**

Make it a habit to drink before training and more importantly, immediately afterwards. If possible, drink between sets whilst training. The volume of fluid should be kept as high as is comfortable. Soft drinks or sports drinks, which contain an energy form with carbohydrate together with electrolyte, are more effective than plain water in improving performance.