

Nutrition

with Peggy Wellington & Dr Rod Jacques

Diet is essential to a triathlete's success and a good nutrition programme is fundamental to any training regime.

Two major factors may cause you to feel exhausted during training. These are carbohydrate (glycogen) depletion and/or dehydration. When you exercise, your body draws on energy from carbohydrate (glycogen) stores in the muscles and liver. These stores are small and will deplete to low levels during long, hard training sessions which can leave you feeling tired and weak with a slowed pace. The key is to boost energy levels between workouts by keeping your glycogen stores topped up. A carbohydrate-rich diet is essential as the amount of glycogen you store is directly related to the amount of carbohydrate you consume. Over endurance events such as triathlon, athletes are dependent on fat stores rather than glycogen, as glycogen stores are only useful for around 90mins of hard work and fat stores can last for between 100-200hrs of exertion. With training, your body switches to gaining energy from fat burning, preserving glycogen stores.

Dehydration Danger Signs

You may feel tired and weak, your legs start to feel wobbly, you have severe thirst and are slowing down. These can be the symptoms of dehydration. If exhibiting these symptoms, you should stop training and allow your body to recuperate.

Weight

A weight loss of 1kg during a session is equivalent to 1litre of sweat loss. Carefully assess your individual requirements by weighing yourself before and after a training session and recording the difference.

The Urine Test

A well-hydrated triathlete will produce pale coloured urine that is plentiful in volume. If an athlete is dehydrated, his/her urine will appear darker in colour and reduced in volume, with a characteristic smell.

Thirst

This is a poor indicator of the need to drink. By the time you are thirsty, you may be dehydrated. Drink before feeling thirsty. Drink little and often, before, during and after exercise. Always start in a well-hydrated state.

Eating For Energy

Consider whether high-carb foods such as breads, pasta, rice, potatoes, pulses, cereals and fruit are a main proportion of your diet or if you eat a small amount of these and fill up on fatty meat or creamy, oily sauces instead. The idea is to keep fat intake relatively low and to boost carbohydrate. A rule of thumb is to make sure that carbohydrates constitute more than 50% of your diet, protein 15% and fat less than 30%. The main sources of protein are lean meat, fish, nuts and dairy products such as milk and yogurt. Your fat intake can also be supplied by the products from the Energy boosters table, as well as low-fat spreads, fish oils and your favourite pudding as a treat after a hard session. Remember, variety is the key to a healthy diet. Avoid eating all your

carbohydrate in one go. This is not the best way to refuel, so spread meals out. Snacking is an important part of the refuelling process.

Carbo Loading

This is essential so that muscles contain the highest possible stores of glycogen (energy) before a race. There are two crucial guidelines for getting as much carbohydrate on board as possible in the week leading up to a triathlon. Firstly, you must reduce training substantially about a week before an event. Secondly, in the days leading up to the event, you should substantially increase your carbohydrate intake. This intake could be around 15- 20g of carbs per 1kg of body weight. Carbo loading often produces a 1-2kg weight due to increased water storage in the muscles. Look for this weight gain when weighing yourself as a measure of your effectiveness at carbo loading.

Energy Boosting Bites

Breads/rolls and buns
Pasta and rice
Noodles
Pizza (with thick base)
Potatoes
Beans/peas/lentils
Fresh/dried/tinned fruit
Low-fat milk puddings
Low-fat yogurts
Popcom
Breakfast cereals
Energy bars
NB Fresh fruit and vegetables are also essential. Although generally low in carbohydrate, they contain many minerals and vitamins necessary for general well-being.

A light carbohydrate meal should be eaten 2-4hrs before exercise and carbs should be taken on board during a race to boost glycogen reserves. While it is true that concentrated fluids are emptied from the stomach more slowly, this can also be a symptom of dehydration. Any discomfort felt as a consequence of taking in fluids could also be dehydration, which makes it much harder for an athlete to absorb fluids and carbohydrate. The easiest way to deal with this is to drink liquid carbohydrates while you are training.

Muscle glycogen is restocked more quickly if carbohydrate is consumed immediately after exercise. If you can't eat, drink instead. Sports drinks are ideal - they provide essential fluid and fuel without the bulk associated with food.