

Nutritional Advice for Competitive Swimmers

Motivation, training and the genes you get from your parents are considered by many athletes and coaches to be the most important factors for successful athletic performance. However without proper nutrition you will not reach your full potential. All top elite athletes gain their success from a number of factors and one of these is nutrition.

What is the link between what you eat and swimming?

Energy and being able to keep going are the most important factors in achieving your best performance. Our bodies create energy from the food we eat - by breaking down the different components of food - carbohydrates, proteins and fat. Carbohydrates are the most important nutrients for swimmers as this is what makes energy in your body. During training (within 90 minutes) the body's energy stores are empty, therefore athletes need more carbohydrates than a normal person.

A healthy diet is one that provides us with the amount of energy we need from the correct types of foods in the right amounts. A swimmer's diet is based on a healthy diet with a few differences. As a swimmer the role of your diet is not just to keep you healthy but also to meet the extra needs your body has due to the extra training you do. What you eat will affect your ability to train, recover between training sessions and compete. So to achieve a well-balanced diet, to lead a healthy life and to give you that extra edge for your swimming it is the basic nutrients that are important and the amounts and balances of these nutrients.

All foods give us energy and it is the most important consideration because if your body runs out of energy you will start to slow down in the pool and feel very tired. You are also still growing and your body uses a lot of energy just to do that, so that energy on top of the energy you need to swim and the energy you need to get you through a day at school means you need to be eating a lot!

As mentioned earlier the best source of energy for when you exercise comes from carbohydrates.

Carbohydrates

For swimming this is the most important nutrient because it is the easiest way to get the energy you need to move and swim faster. Carbohydrates come in two forms – simple and complex. Complex carbohydrates are better as the energy they provide is released slowly throughout the day. Simple Carbohydrates give you a quick energy burst. Carbohydrates should make up just over half of the food on your dinner plate.

Food Sources of Complex Carbohydrates

You should be eating plenty of these

Bread

Rice

Breakfast Cereals

Pasta and Noodles

Potatoes

Pizza Bases

Crisp Breads, oatcakes and rice cakes

Sweet Corn

Beans (inc. Baked)

Peas and Lentils

Food Sources of Simple Carbohydrates

These will give you a quick boost of energy but should only be consumed in small amounts

Fruit (fresh, canned, dried and juice)

Chocolate and Cereal Bars

Sweets (jelly babies, jelly beans)

Cakes

Buns

Biscuits

Puddings

Yogurts

Soft Drinks

Sports Drinks

Tips for getting enough carbohydrate foods

Base each meal around one of the following – rice, pasta, noodles, pizza, breads or potatoes

Eat puddings that contain a lot of carbohydrates – fruits, yoghurts or rice pudding

Snack on high carbohydrate foods and take these snacks to school and training

Have a carbohydrate rich snack after training

Drink juice or squash every time you eat

You should avoid eating all your carbohydrates in one huge meal each day – this is not the best way to refuel your energy stores. Meals should be spread out throughout the day. Therefore top-ups with carbohydrate foods are important

Protein

The second aim in achieving a good athlete's diet is to eat the right amounts of protein.

Protein can be found in foods such as meat, fish, peas, beans and dairy products such as cheese and eggs

This part of your diet is important because:

It helps repair your body after training

It helps you grow properly

It helps your muscles get stronger

Protein is not as important as carbohydrates for swimmers but you still need some protein foods in your diet every day. Make sure the protein sources you eat are lean and low in fat. Cooking methods are also important- try and opt for grilled or baked foods and avoid fried foods wherever possible.

Fat

Remember that high fat diets aren't good for any one, especially swimmers. When you are training and competing eating a lot of fatty foods such as pies or sausage rolls can make you feel full and uncomfortable and can hamper your performance, this is especially important during competition. Another negative aspect of high fat diets is that the high fat foods make it difficult for you to meet the high carbohydrate requirements because you would usually choose fatty food over carbohydrates. So keep the amount of fatty foods you eat down to a minimum.

Fruit & Vegetables

You should aim to eat 5 portions of fruit and vegetables per day. Fruit and vegetables give you all the vitamins and minerals your body needs to work properly and to its full potential. Calcium, iron and zinc are especially important for growth and to help your immune system fight off infections. A portion of fruit is an apple, 2 plums, a pear, glass of fruit juice for example. A portion of vegetables is 2 spoonfuls of peas or carrots, 2- 3 florets of broccoli for example. Remember frozen vegetables count, so no excuses!

Fluid

Contrary to popular belief swimmers do sweat- just because you can't see it doesn't mean it's not there! The atmosphere in most swimming pools is very hot and humid and these conditions can lead very easily to dehydration. So you are losing fluid/water all the time and you must replace it. Being dehydrated affects your co-ordination, concentration and reduces the length of time you can keep swimming for.

Golden Rule

Drinking little and often and before thirst sets in is the key to staying well hydrated

Dehydration Checks

Weighing – weigh before a training session and immediately after – weight loss of 1kg is the equivalent of 1 litre of sweat lost. Workout how much is lost and you should aim to drink the same amount

An easier test that you can do is the 'pee-test'. This involves looking at your urine- if you're going to the toilet regularly, producing lots of urine and it is clear in colour then you are well hydrated. If you are not going often and the urine is dark in colour, smelly and not much of it then dehydration has set in and you need to get drinking.

And remember being thirsty is a poor sign of dehydration –by the time you feel thirsty your body is already dehydrated. So don't wait until you are thirsty to drink – it's too late by then.

So make sure you drink before training and throughout the training session – always take your bottle on to the poolside and leave it at the end of the lane and take sips whenever you can. Carry on drinking after the session.

Make sure you have enough drinks with you. It is also especially important throughout a competition- even if you are just watching your other team mates swim

Putting it all into practice

Many top swimmers will follow this eating pattern.

Snack before early morning training

Drinking during and after training

Breakfast within 30 minutes of finishing training

Mid Morning Snack

Light meal at lunchtime

Pre-training snack mid afternoon

Drinking during and after training

Dinner

Small snack before bed

Summary

Overall a well-balanced diet with sufficient energy is the target with an extra emphasis on carbohydrates. The 30 Minute Rule, muscles are most susceptible to replenishing carbohydrate stores within the first 30 minutes after exercise. Fluid is also a major factor and you should make sure you are always well hydrated

Good Nutrition will not make you into a world class performer but bad eating habits may prevent you from realizing your potential and reaching your goals