

## **Nutrition for Training and Competition**

An athlete should pay constant attention to their diet maintaining a wide variety of foods, which should roughly be made up of 60-70% carbohydrate, 15-20% proteins and 20-25% fat. The individual should make sure they consume enough calories to maintain a stable weight (unless they are still growing) so that energy intake matches expenditures. However the young athlete needs to be aware that their energy intake also needs to provide for growth and development, and if these needs are not met, it can lead to a delay in stature and puberty.

It is important to pay attention to fluid and carbohydrate before a training session or competition to delay the effects of dehydration and glycogen depletion, which can result in feelings of fatigue and decrease your performance. If you are training in the morning, you may not always have time or may not feel like eating breakfast, but after an overnight fast it is important to top up your glycogen stores and make sure you are sufficiently hydrated otherwise your training could be compromised and may suffer early fatigue.

### **Night Before:**

Make sure you have a substantial evening meal, which is high in carbohydrate, which is preferably low glyceamic index, realising energy slower and help you feel fuller for longer, preventing the temptation for unhealthy snacks. Meals such as pasta, rice, and baked/ jacket potatoes are good choices, especially if you have trained that evening. Pay special attention to drinking and make sure you consume plenty of fluids it is an idea to take a drink to bed with you to prevent yourself getting thirsty.

### **Pre Training/ evening meal:**

Try and drink approximately 200-500ml of fluid before you start training (squash or juice for example), this can be done in the car to save time, or during a poolside warm-up, then during the session pay attention to making the most of breaks and rests in training to consume fluids roughly aiming to replace the fluid lost as sweat (500-1000ml). If the individual finds it uncomfortable to drink during the session, encourage small frequent sips to drink approx 500ml of fluid immediately after training and to keep consuming fluid at regular intervals throughout the day so that at least the 2L a day requirement is met.

The pre training or competition meal should be eaten roughly 3-4 hours before the competition and should be largely a low glyceamic index carbohydrate meal. Some ideas are listed below, but choose foods, which you are comfortable with and will leave you confident to perform.

### **Ideas for pre training/ event meals:**

<ul style="list-style-type: none"><li>• Toast with honey or jam</li></ul>	<ul style="list-style-type: none"><li>• Jacket Potato and Beans</li></ul>
<ul style="list-style-type: none"><li>• Cereal with low fat milk</li></ul>	<ul style="list-style-type: none"><li>• Pasta with a low fat sauce</li></ul>
<ul style="list-style-type: none"><li>• 2 pieces of fruit</li></ul>	<ul style="list-style-type: none"><li>• Roll or sandwich with a low fat filling</li></ul>
<ul style="list-style-type: none"><li>• Cereal Bar</li></ul>	<ul style="list-style-type: none"><li>• Porridge with low fat milk</li></ul>

<ul style="list-style-type: none"> <li>• Smoothie</li> </ul>	<ul style="list-style-type: none"> <li>• Fresh fruit salad with low fat yoghurt</li> </ul>
<ul style="list-style-type: none"> <li>• Baked beans on toast</li> </ul>	

### After Training:

It is also important that you eat a high carbohydrate meal/snack within 30min of your training session: this is the 30min 'open window' where glycogen is quickly restored and will quicken your recovery from a training session. High glyceamic index foods should be targeted which will release glucose quickly into the blood stream and promote recovery. It is also advisable to include a protein source of food in the post meal, which will help the uptake of glycogen into the muscles and help facilitate recovery. Targets should be to consume 50-100 gms of carbohydrate after a competition or training, maybe in small frequent snacks. Once again if the individual struggles to eat after training, the carbohydrate should be encouraged through fluid, 800ml-1l of sports drink, 800ml of cordial, or a smoothie will provide 50gms of carbohydrate and will also help rehydrate.

### Ideas for post training/ competition meals:

<ul style="list-style-type: none"> <li>• 800ml-1l sports drink</li> </ul>	<ul style="list-style-type: none"> <li>• Baked Beans</li> </ul>
<ul style="list-style-type: none"> <li>• 800ml cordial</li> </ul>	<ul style="list-style-type: none"> <li>• Bowl of breakfast cereal with low fat milk</li> </ul>
<ul style="list-style-type: none"> <li>• 2-3 pieces of fruit</li> </ul>	<ul style="list-style-type: none"> <li>• Pasta with low fat sauce</li> </ul>
<ul style="list-style-type: none"> <li>• 1 round of honey or jam sandwiches</li> </ul>	<ul style="list-style-type: none"> <li>• Chicken sandwich with low fat filling</li> </ul>
<ul style="list-style-type: none"> <li>• 3 muesli bars</li> </ul>	
<ul style="list-style-type: none"> <li>• 2 cereal bars</li> </ul>	

It is also important that you pay particular attention to restoring your fluid balance after training and make sure 500ml is drunk as soon as possible. Thirst is a bad indicator to hydration – you are already sufficiently dehydrated to compromise performance. You can check the hydration status by looking at your urine colour: this should be clear – pale yellow colour, a dark brown colour signifies dehydration.