****8037 - During and Post-Run Nutrition Strategies**

**Strategies to meet your competition nutrition goals**

The goals of your diet during your marathon are to prevent dehydration, prevent depletion of glycogen/energy stores, maintain blood glucose, maintain electrolyte balance, prevent stomach upsets.

* Practise your nutrition plan in training and write it down.
* Take into consideration temperature and humidity when thinking about fluid intake.
* Start drinking early in competition and continue drinking at regular intervals during the event. When exercise *intensity* is high or in *longer* events, plan to consume 1 g of carbohydrate per minute or 30-60 g per hour.
* Use carbohydrate-containing sports drinks or moderate to high glycemic index foods. For example, a litre of 7% sports drink will provide 70 g carbohydrate, a banana will provide 20 g carbohydrate, a cereal bar will provide 20 g carbohydrate.
* When using a sports drink choose one you have tested in training. A sports drink with 4-8% (ie: 40-80 g/l or 4-8 g/100ml) carbohydrate and 500-700 mg/l (20-30 mmol) sodium is recommended.
* Consume your carbohydrate-containing drink or food at regular intervals during your marathon. Some people set their watches to alarm every 20 minutes as a reminder.
* In an endurance event like a marathon you may want to consume solid foods. Examples of moderate to high glycemic index foods that can be used include ripe bananas, sandwiches with jam, honey or banana, jelly beans, cereal bars.
* Sports bars can also provide a convenient form of carbohydrate. Experiment with these in training. You may want to take the wrapper off and cut the bar into bite-sized pieces to make them easier to eat.
* Find out what foods will be available at the aid stations at your marathon and familiarize yourself with these in training, or take your own food and fluids with you.

**Strategies to restore your fluid and electrolyte balance**

* No matter how well you followed your fluid plan during your event, you will probably have some degree of dehydration. It is essential to replace lost fluids.
* Start drinking as soon as you have finished your event, and continue to drink until your urine is clear and you body weight is back to pre-race weight. You need to drink 1.5 times the amount of body weight you have lost to replace fluid losses from exercise and from urination.
* Replacing sodium losses will ensure maximum fluid retention. You can replace sodium losses by drinking a sports drink or eating a post-recovery meal or snack with salt as a component, or added.
* Sports drinks provide optimal rehydration as the sodium content rebalances body fluid, and helps your body retain the consumed fluid.
* Drink cool fluids that you enjoy.
* Avoid drinks containing caffeine and alcohol after competing.

**Strategies to replace used glycogen stores**

* For the first two hours after your event, muscle cells and enzymes are more receptive to optimize glycogen recovery. This is the best time to eat moderate to high glycaemic index foods and using sports drinks. These products will provide glucose to the blood and muscles quickly. If you wait until after two hours to consume carbohydrate, your recovery will be slowed down.
* In the 24 hours after your event aim to consume 7-10 g carbohydrate per kg of body weight from carbohydrates.
* Approach this goal by eating 1 g carbohydrate per kg of body weight as soon after exercise as possible, then have a high-carbohydrate meal in the next two hours, and normal meals and snacks for the rest of the day.
* If a main meal is not available, have carbohydrate snacks (at least 50 g every two hours) until you can have your next main meal.
* Sports drinks can provide carbohydrate as part of the glycogen resynthesis strategy.

**Strategies to help the repair of muscle damage**

* Muscle damage can occur due to body contact or eccentric exercise (that is, the type of exercise that makes you sore the next day).
* The damage to muscle fibres means they cannot store glycogen as well.
* After an intensive race, or bruising and muscle damage (that is, soreness), pay special attention to meeting your recovery carbohydrate needs to help muscle recovery.
* Do not expect optimal endurance performance until soreness is gone, as muscle glycogen will not be totally replaced.
* Avoid alcohol for at least 24 hours. Alcohol causes more blood to flow to the injured area, increasing swelling and bleeding that will slow recovery and make the injury worse.

**Hints for the post-event diet**

* Recovery will be just as rapid if the carbohydrate is consumed in a few meals or many snacks, as long as you meet your total carbohydrate needs.
* Moderate to high glycemic index foods may promote greater glycogen storage than low glycemic index foods.
* Including small amounts of protein in the recovery meal can help increase the rate of muscle glycogen storage.
* Glucose and sucrose provide faster muscle recovery than fructose, the sugar found in most fruit and fruit products. Fructose does enhance liver glycogen storage, but only very slowly replaces muscle glycogen. It can form part of the recovery meal, but should not be the only source of carbohydrate.
* Choose foods that you like!

***Sources:*** [***www.marathon-training-program.com***](http://www.marathon-training-program.com)[***www.marathon.ipcor.com***](http://www.marathon.ipcor.com)