

## Strategies for a speedy recovery

Recovery covers a complex range of processes which include:

- Refuelling the muscles and liver of their expended energy
- Replacing the fluid and electrolytes lost in sweat
- Allowing the immune system to deal with any damage caused by the exercise bout
- Making new proteins, red blood cells and other cellular components

After a hard session, whether it was an interval session involving short bursts of exercise that quickly depleted your glycogen stores, or a prolonged endurance session, your goals are to get those muscles re-synthesising glycogen and replace fluids lost in sweat as soon as possible for fast recovery.

Refuelling ....

There is lots of evidence to show that carbohydrate-rich foods and drinks taken immediately after hard exercise will refuel your muscle glycogen stores quicker than if you delay eating, which is really important when your next session is less than 24 hours away. This will mean being organised to have suitable foods and drinks available – in your kit bag if necessary. Appetite is often suppressed after a hard session, so it is important that you choose foods that are easily digested and use fluids that contain carbohydrate to kick start the refuelling process. Including protein in your recovery snack will help muscle growth and conditioning, especially after strength training sessions.

Practical guidelines

Each of the following selections in Table 1 and Table 2 give approximately 50g carbohydrate. You should consume 1g carbohydrate for every kilo you weigh within ½ hour of stopping exercise to ensure speedy recovery of glycogen stores, and repeat this after an hour or until normal meal patterns are resumed. The intake of protein (10 – 20g) will also help meet goals for muscle growth and conditioning.

Table 1 50g carbohydrate snacks giving at least 10g protein

- 500mls of low fat flavoured milk drink
- 200mls carton yogurt drink and large banana
- 2 slices bread in sandwich with meat/chicken/egg filling
- average bowl of breakfast cereal with 200mls low fat milk
- 2 tubs of low fat yogurt
- sports bars (check the label)
- cereal bar and 1 tub low fat yogurt
- 5 jaffa cakes and 1 tub low fat yogurt
- small tin baked beans with 2 slices of toast
- average baked potato with grated cheese
- 1 slice thick crust pizza

## Table 2 50g carbohydrate snacks

- 800 – 100mls of isotonic sports drink
- 1200mls sugar-containing fruit squash
- 500mls fruit juice drink or fresh orange juice
- 2 handfuls of sultanas
- 2 handfuls of jelly babies, wine gums, fruit pastilles
- standard bar of Turkish Delight
- 3 jaffa cakes and 2 fig rolls
- 2 – 3 cereal bars
- 2 slices white bread with jam or honey
- 2 pancakes with jam, honey or syrup
- fruit scone with jam or honey
- 2 slices currant or malt bread with jam or honey
- soft white roll with banana
- 3 rice cakes with jam or honey
- low fat yogurt and banana
- 1 tub (150g) custard and 3 tablespoons tinned fruit

## Rehydration ....

Replacing fluid that you have lost through sweating must be replaced so as not to slow up the recovery process. Starting the next session in a dehydrated state will reduce the quality of your training. Sweating is an individual thing and the amount athletes' sweat varies a lot. A previous newsletter article (Go with the flow ... the facts about fluids (February 05)) explained how to work out how much fluid you lose as sweat during an exercise session. Use this as a guide to how much you need to drink after your workout.

## Practical guidelines

- ensure an adequate supply of cool palatable drinks is available
- rehydration should start immediately with half or full strength isotonic drink. A fluid that contains some sodium (salt) and carbohydrate provide faster body water replacement than plain water, is more palatable and helps refuelling
- drink to a plan; do not rely on thirst to determine needs
- remember that fluid continues to be lost during recovery through urine losses and ongoing sweating
- alcohol should not be taken in the recovery period as it can increase urine losses
- where possible, post-exercise activities that promote sweat losses eg hot spas, saunas and exposure to the sun should be avoided

***Ruth Wood-Martin Accredited Sports Dietitian***