# 3 ways to beat exercise fatigue and maximise your performance

Do your workouts frequently leave you feeling fatigued and struggling to recover before the next session? Then read on...

## Rehydrate

Failure to replenish fluids and fuel after training can quickly result in sore muscles, fatigue and under-performance at your next training session. If you are swimming for longer than an hour, opt for a drink containing 4 – 8 g carbohydrate per 100 ml, such as cordial or squash diluted 1 to 6 during/ after your session. Sports drinks containing electrolytes are unnecessary unless you are training > 2 hours and sweating heavily. For hard (elite) swimming, the general rule is to drink about 125ml of fluid for every kilometre swum e.g. 750ml for a 6km session. You can monitor you hydration status by checking the colour of your urine (the 'pee test'). A pale straw colour indicates good hydration.

#### **Fuel right**

The optimal time for your pre-exercise meal is 2-4 hours before training. So, if your training session starts at 7pm, have dinner at 4 or 5pm. Aim for 'comfortably full', not stuffed. If there really isn't time for a meal then have a smaller meal or healthy snack 30 minutes or 1 hour before training, with a drink.

Combining carbs with protein and fat will provide sustained energy and maximum performance during a 2hour session. As a general guideline: have one third of your plate nutrient-dense ('quality') carbohydrate-rich foods (e.g. potatoes, sweet potatoes, wholegrain bread, pasta or rice); one third protein (meat, fish, chicken, eggs, cheese, beans, lentils) and one third vegetables (or salad). You should also include healthy fats and oils (butter, olive oil, oily fish, nuts), and at least 400g (5 portions) of fruit and veg a day to ensure you get the omega-3 fats, vitamins, minerals, fibre and other protective nutrients needed to stay healthy and promote recovery.

#### Suitable pre-training meals:



- Jacket potato with cheese, fish, meat or beans; veg
- Pasta with meat, cheese, poultry or fish; veg
- · Rice with chicken, fish or beans; veg
- One pot dish with meat or fish or beans; potatoes or pasta; veg e.g. stir-fry, curry, stew

### No time for a meal? Then have one of the following 5 – 60 min pre-training:



- Yoghurt & banana
- Peanut butter on toast
- Wholegrain sandwich
- Dried fruit and nuts
- Fruit & nut bar (<a href="http://www.anitabean.co.uk/recipes/">http://www.anitabean.co.uk/recipes/</a>)

#### Refuel

For speediest recovery, you should include both carbohydrate and protein in your post-exercise snack or meal. The combination of these two nutrients promotes faster muscle repair and greater muscle growth, and reduces post-exercise muscle soreness. Your post-workout meal or snack should, ideally, comprise about 20g protein.

However, muscle recovery continues for several hours, perhaps up to 24 hours. So you should continue consuming protein at regular intervals throughout the day. Aim to have around 15 – 25g protein at each meal and also include protein in your snacks.

Here are 6 options that provide carbohydrate and protein in amounts that optimize recovery as well as help meet other nutritional needs

1. 500ml yoghurt and fruit milkshake. Use 500ml of milk plus yoghurt and fresh fruit (bananas, strawberries, pears, mango and pineapple give the best results) for an excellent mixture of protein, carbohydrate and those all-important antioxidants.

- 2. 50g of almonds or cashews plus 250ml yoghurt Nuts supply not only 10g of protein but also B vitamins, vitamin E, iron, zinc, phytonutrients and fibre. Yoghurt supplies another 10g of protein.
- 3. 250ml strained Greek yoghurt. Also perfect after a strength workout, strained Greek yogurt is more concentrated so contains about twice the protein of ordinary yoghurt.
- 4. 500 ml milk with a banana. Any type of milk will give will provide the protein needed to maximize muscle adaptation after exercise. It also contains the optimal amount of the branched chain amino acid, leucine, to promote muscle building after exercise.
- 5. A 'high protein' sandwich. Make your own with 85g meat, chicken, turkey, fish or cheese and a couple of slices of wholegrain bread, then add some salad for a great refuelling snack.



Super flapjacks
 (http://www.anitabean.co.uk/recipes/) An ideal alternative to shop bought flapjacks if you want rapid recovery plus muscle rebuilding and repair

For more information on sports nutrition: www.anitabean.co.uk