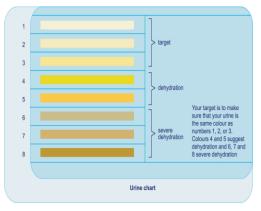
## **Recovery Nutrition for Swimmers**

Proper nutritional recovery is vital to performance. Failure to replenish fluids and fuel after training can quickly result in sore muscles, fatigue and under-performance at your next training session. Here's how to promote full recovery after a hard session in the pool:

## Priority 1: Replace fluids

Your muscles cannot fully recover until your cells are **properly hydrated**. So make drinking your priority – start drinking while stretching, before you've showered. The exact amount you need to drink depends on how dehydrated you are after swimming. The 'pee test' (see the chart below) will give you an idea how dehydrated you are, otherwise weigh yourself



before and after training. For each **0.5 kg (1 lb** approx) of body weight lost, drink 600 – 750 ml of fluid (e.g. water, diluted juice or squash, milk – but not all in one go.

**Drink little and often** – I suggest 100 – 150 ml every 10 or 15 minutes over the next hour or so until your urine is very pale yellow.

## Priority 2: Refuel

You need to replace the fuel (carbs) that you've used otherwise you will feel sore, achey and tired during your next session.

**Take advantage of the 30-minute window:** This is when your muscles **restock energy** levels faster than normal. The sooner you supply your muscles with carbs and protein after training, the quicker they will **repair and rebuild**. So have your recovery drink/ snack ready in your kit bag or in the car to eat on your journey home.

**Eat carbs with protein:** To help the body repair and rebuild, you need carbs with protein in a ratio of 3: 1. Ideally you should consume **approx 20g protein.** You can achieve this either in the form of drink (milk) or food (see below). You don't need commercial recovery drinks

Opt for a milk drink: Milk, flavoured milk and milk shakes are near-perfect recovery drinks. Research shows that all types of milk after training speed up fuel recovery, encourage muscle gain and even reduce muscle soreness after training. They also help rehydrate the body more effectively than sports drinks, according to recent studies. Opt for whole, semi or skimmed milk; ready-to-drink milk shakes (e.g Yazoo) or make your own yoghurt smoothie from fruit, yoghurt and milk OR milk shake powder and milk.

Here are some ideas for post-workout snacks supplying **20** g protein:

- 500ml of **milk** or milkshake plus a banana
- 250ml milk or milkshake plus 2 pots of fruit yoghurt
- 500 ml milk or milkshake plus an oat-based bar or flapjack
- 200ml milk or milkshake plus 1 pot yoghurt plus 1 slice of toast and honey
- Homemade milk shake: Blend 1 cup milk, 1 banana, 1 pot yogurt, 1 tbsp chopped
  walnuts, 1 scoop chocolate milkshake powder and 6 to 8 ice cubes
- Fruit yoghurt smoothie: whizz together 2 pots of yoghurt, 1 banana or a handful or berries and 150ml fruit juice in a blender
- 50g nuts (e.g. almonds or cashews) plus 2 pots of yoghurt





