

Recovery from training and competition

The quality of recovery after training will determine how good your strength gains are and how well you perform in the next training session. Poor recovery can mean arriving at competition or the next training session with depleted energy levels and unable to perform at your best. **Timing and balanced meals** are two key strategies to **plan and apply** for an effective recovery.

WHAT DO I EAT?

The body needs **carbohydrate** to replenish stores and to assist with muscle repair and recovery. The body also needs **protein** for muscle growth and repair damaged muscle to limit muscle soreness. To start the recovery process aim to include a protein and carbohydrate food source in a post training/competition meals as soon as you can after finishing.

Carbohydrate approx. **1 – 1.2 g/kg body weight**

Protein approx. **10 – 20g**

Low in fat as fat slows absorption and may delay delivery of nutrients and fuel to the muscle.

Food choices

An example of some carb + protein snacks* are:

- Sustagen or Up and Go popper
- 200g low fat yoghurt
- 300ml low fat flavoured milk
- Le Rice or low fat creamed rice
- 2 slice bread with slice low fat cheese and ham
- 220g tin Baked Beans
- 1 cup wholegrain cereal and light milk
- Smoothie with skim milk, fruit, low fat yoghurt
- 1 cup cooked pasta with a tomato pasta sauce and 1tb low fat cheese
- 95g tin tuna on toast or rice cakes

Top up carbs with fruit, oat based muesli bars, crackers or bread/sandwiches or sports drinks.

*The amount of carbohydrate and protein will vary depending on the amount and intensity of training and physical status goals.

Hydration

If large amounts of fluid, sodium and electrolytes are lost during activity it can lead to dehydration which has an impact on performance and concentration and can make you feel dizzy, tired and fatigued, then the more dehydrated you are, the less you will feel like drinking. Drink fluids regularly over the day and use urine colour as a guide; lighter/clear = good hydration; dark yellow = need more fluid.

Find how much fluid you are losing from the difference between pre and post training weight, 1kg lost in body weight = 1L sweat/fluid loss. This amount should be replaced by 150% over the next few hours following training. Eg: 1.2kg b/w lost = 1.8L of fluid to drink. Water, sports drinks and even low fat milk are the best choices for rehydration directly after activity as juice and soft drink can be too sweet or acidic, this can slow the absorption of fluid which slows down rehydration and can delay recovery.

WHEN DO I EAT?

20-30 min following activity or as soon as possible, is the most crucial time to replenish protein and carbohydrate to replace stores and aid muscle recovery. Leaving it longer than this can delay the recovery process by slowing the body's ability to build and repair muscle and adequately accumulate fuel stores for the next training session.

When carbohydrate stores are depleted they can take around 20 hours to be replenished, so **refueling will not happen in one meal alone**. Continuous repair needs continuous fuel, rather than one large meal, so fuel is utilised effectively. A snack, as outlined, in the 30min following training can start the recovery process and then be followed up with a healthy balanced meal or snack until regular meal patterns are resumed.

If you don't think you can stomach food this soon after training, try liquids or foods that are easy to eat such as Sustagen, Up & Go's, Sports drinks, custard, yoghurt or creamed rice as balanced choices to get the recovery process started.

Planning ahead, packing and preparing a recovery meal is important so there is food available for recovery as soon as you finish training or competing. If you wait until the next meal or while you prepare, find or buy food it may be too late and muscle may break down rather than build.