



Fuelling Around Training

Eat to train, then eat to recover

Great training deserves great fuel. What you eat before, during and after a session shapes your energy, performance and recovery. This guide covers the practical basics for everyday training and bigger competition days, built around carbohydrate for fuel and protein for repair.

Before you train

- Eat a balanced meal 2 to 4 hours before, then top up 1 to 2 hours before if you need to.
- Base it on carbohydrate (around 1 to 4 g per kg), with some protein.
- Keep it low in fat, fibre and spice to avoid stomach trouble.
- If nerves or timing are an issue, a liquid option like a smoothie or sports drink digests more easily.

During your session

Session length	Carbohydrate	Notes
Under 1 hour	Usually none needed	Water is enough. A carbohydrate mouth-rinse can help hard, short efforts.
1 to 2 hours	30 to 60 g per hour	Sip regularly, and add electrolytes if you are sweating heavily.
2.5 hours or more	up to 90 g per hour	Mix sources (drinks, gels, solids), add some protein and sodium.

For more than 60 g an hour, use a mix of carbohydrate types (for example glucose plus fructose) so your gut can absorb it.

After you train: refuel, repair, rehydrate

- **Refuel:** 0.5 to 1 g carbohydrate per kg, sooner if you train again within 24 hours. The first hour matters most.
- **Repair:** around 0.3 g protein per kg, roughly 20 to 40 g. Protein after exercise boosts muscle repair.
- **Rehydrate:** replace about 150% of the fluid you lost.
- A simple win: chocolate milk, Greek yoghurt with fruit, or a chicken sandwich ticks all three boxes.

Fuel for the work required. Match carbohydrate to the day: more on hard and long days, less on easy or rest days. Protein stays steady each day because it is set by your body weight, not your training load.

Bigger days

- For events over 90 minutes, carb-loading (7 to 10 g per kg a day for 24 to 48 hours) tops up your glycogen stores.
- Start the day big and taper, favour simple low-fibre carbs, and introduce nothing new.
- On the day, a carb-based meal 2 to 4 hours before, then a small low-fibre snack about 1 hour before.
- A protein and carbohydrate snack within an hour of bed, using a slow-release protein like Greek yoghurt, aids overnight recovery.
- Train your gut: practise your race-day fuelling in training, at least weekly, so it absorbs more with less discomfort.

Where to learn more: the NHS, the British Dietetic Association (BDA), and the Sport and Exercise Nutrition register (SENr). For a plan tailored to your sport and goals, get in touch, or speak to a registered dietitian.

This leaflet is general nutritional guidance for education only. It is not medical advice, diagnosis or treatment, and it does not replace advice from your GP or a registered dietitian. Always check with a qualified professional before making significant changes, particularly if you have a health condition, are pregnant, or take medication.

Ready to take the next step? Book a free call or start your food diary analysis at performancenutritionlondon.co.uk