Pre-workout nutrition: What to eat before a workout

Fuelling properly before a workout can help you train harder and keep going for longer, ensuring you perform to your full potential. But sometimes, scheduling a pre-workout meal isn’t always easy, especially if you work out early in the morning or at the end of a long day. Here’s how to plan your nutrition around your workout along with some easy meal and snack ideas that will guarantee you’ll have plenty of energy.

Why is pre-workout nutrition important?

Most of the energy needed for your workout comes from your stored fat and carbohydrate (glycogen). Carbohydrate in the food that you’ve eaten in the days and hours before will have been converted into glycogen and stored in your muscles and liver. Food consumed immediately before exercise will not be stored as glycogen, but will influence the fuel mixture your muscles burn during your workout. For example, if you have a meal containing carbohydrate in the pre-workout period, you’ll burn a higher proportion of carbohydrate and a lower proportion of fat during exercise. This is advantageous if you’re planning a high intensity endurance session. Having readily available carbohydrate – in the form of blood glucose or muscle glycogen – will allow you to exercise at a higher intensity for longer.

If you’re planning a long session, say over 60 minutes, then eating a pre-workout meal will keep hunger at bay and raise blood glucose. This will help delay the onset of fatigue and increase your endurance and performance.

What should you eat before a workout?

Your pre-exercise meal should include foods rich in carbohydrate as well as some protein and healthy fat. The combination of these macronutrients will provide sustained energy to help you get through your workout. Both protein and fat slow the digestion and absorption of carbohydrate so the closer your meal is to your workout, the less you want to eat. Eating too much fat before a workout (think burger and chips or a bacon sandwich) can slow digestion and result in stomach discomfort. On the other hand,
eating a meal devoid of fat and protein (think jam sandwiches) could leave you hungry and lacking in energy. Suitable options include:

**Breakfast:** Porridge with milk and few chopped almonds or a spoonful of nut butter

**Lunch:** Jacket potato with hummus, tuna or chilli; or a falafel and avocado wrap

**Dinner:** Vegetable risotto with peas or Pad Thai (stir-fried noodles) with tofu or chicken

But if you have less than 1 - 2 hours before your workout, opt for an easy-to-digest, high-carbohydrate snack. Suitable options include:

- Low fat plain Greek yogurt with granola
- Bananas
- Peanut butter on toast
- Fruit and nut Bar
- A smoothie made with berries, bananas and milk

### How much should you eat?

The closer your pre-workout meal is to your workout, the smaller it must be. For example, if you have only 1 - 2 hours before your workout, then eat a small meal or snack of 300 to 400 calories, or about 5 kcal/ kg body weight. If you can eat 4 hours before your workout, then have a larger meal of 400 to 800 calories, or approximately 10 kcal/kg body weight. In practice, the exact timing of your pre-run meal will probably depend on constraints such as work hours, travel and your training schedule. Try to plan meals as best you can around these commitments. For example, if you run in the early evening, plan to eat a substantial lunch followed by a smaller snack of 100–300 kcal 30–60 minutes before your run. If you prefer running at midday, then eat a substantial breakfast followed by a smaller snack before your run if you’re feeling hungry.

### When should you eat before a workout?

Ideally, try to schedule your pre-exercise meal 2 to 4 hours before your workout. This will give you enough time to digest the food but not too long an interval to cause this energy to be used up the time you begin exercising. Eating a meal too close to exercise will almost certainly result in stomach discomfort, as the blood supply diverts from your digestive organs to the muscles. The body cannot digest a big meal and exercise at the same time! On the other hand, leaving too long a gap means you
may feel hungry, light-headed and lacking energy during exercise. You should feel comfortable – not too full and not hungry.

**Is fasted training good or bad?**

Fasted training isn’t anything new but its recently become more popular as a weight loss strategy. The theory behind fasted training is to encourage the muscles to burn more fat for fuel and less carbohydrate. This is true up to a point but it doesn’t necessarily mean you’ll lose weight or that you’ll end up losing weight quicker. To lose weight, you need to be in a calorie deficit, that is you must consume fewer calories than your body needs over the course of several days, not a single workout. Training fasted means you may feel hungry, light-headed and lacking energy during exercise. Sometimes, fasted training may leave you so hungry that you overeat after the session. Additionally, it may cause you to fatigue sooner or to drop your pace (intensity), resulting in a lower overall calorie expenditure.

If you prefer training fasted (such as first thing in the morning), then that’s fine provided you’re doing low or moderate intensity exercise (as you’ll be burning relatively more fat and less carbohydrate). However, if you plan to do high intensity exercise longer than 60 – 90 min, then having a high carbohydrate meal or snack beforehand will help increase your endurance (as you’ll be burning relatively more carbohydrate and less fat).

For lower intensity workouts like yoga or recovery runs, the overall calorie burn is fairly low so a pre-workout meal is less important and you would be fine not eating beforehand. Similarly, high-intensity but intermittent workouts such as weight training places fairly small demands on glycogen stores and the overall calorie expenditure is not as great as continuous high intensity aerobic exercise, such as tempo runs or hard cycle rides.

Endurance athletes may use fasted training strategies to increase endurance training adaptations. For more information, see ‘[Can a low carb diet help or hinder your performance?](https://anitabean.co.uk/)' and ‘[Fuel For Your Workout: How Periodised Carbohydrate Training Can Help Your Performance](https://anitabean.co.uk/pre-workout-nutrition-what-to-eat-before-a-workout-2/)."