



Muscle Gain 101

The nutrition that turns training into muscle

Building muscle takes more than lifting. Your body needs the right fuel and enough protein, at the right times, to turn training into growth. Here are the essentials, backed by the science.

How muscle grows

Muscle is built through muscle protein synthesis, switched on by resistance training and by eating protein. Growth happens when synthesis outpaces breakdown over time. Get the training and the nutrition right, and the muscle follows.

The four levers

- **A modest calorie surplus.** Muscle can be built at maintenance, but a surplus of about 200 to 300 kcal a day (5 to 10%) helps. Roughly 2500 extra calories a week supports about a pound of lean gain.
- **Enough total protein.** Aim for 1.4 to 2.0 g per kg a day, with some benefit up to about 2.2. Keep it up on rest days too, at least 1.7 g per kg.
- **Spread it out.** 20 to 40 g of quality protein across 3 to 6 meals stimulates growth better than one big hit.
- **Fuel with carbohydrate.** Around 40 to 60% of intake from mostly complex sources powers hard sessions and supports recovery.

Surplus plus protein plus training. Eat slightly above maintenance, hit your protein target every day, spread it across meals, and keep progressing your training. That combination, kept up consistently, is what grows muscle.

Timing tips

- Do not skip breakfast. A high-protein breakfast refuels overnight losses and may help muscle more than protein later in the day.
- Post-training is a good chance for one of your protein meals, alongside carbohydrate and fluid.
- A slow-release protein before bed, such as Greek yoghurt, milk or cottage cheese (casein), supports overnight repair.

Do supplements help?

Food first. If your diet covers it, you may not need any. The best-supported options are creatine (safe, well-researched, and good for strength and size) and whey or casein protein for convenience. Weight gainers only help if you struggle to eat enough, and are often high in sugar. See the Supplements leaflet for the full picture.

Where to learn more: the British Dietetic Association (BDA), the International Society of Sports Nutrition (ISSN), and the Sport and Exercise Nutrition register (SENr). For a plan tailored to you, 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