



SPEED PROJECT

Sport & Prevention of Emerging Eating Disorders

Macronutrients for performance and recovery

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Talking about macronutrients

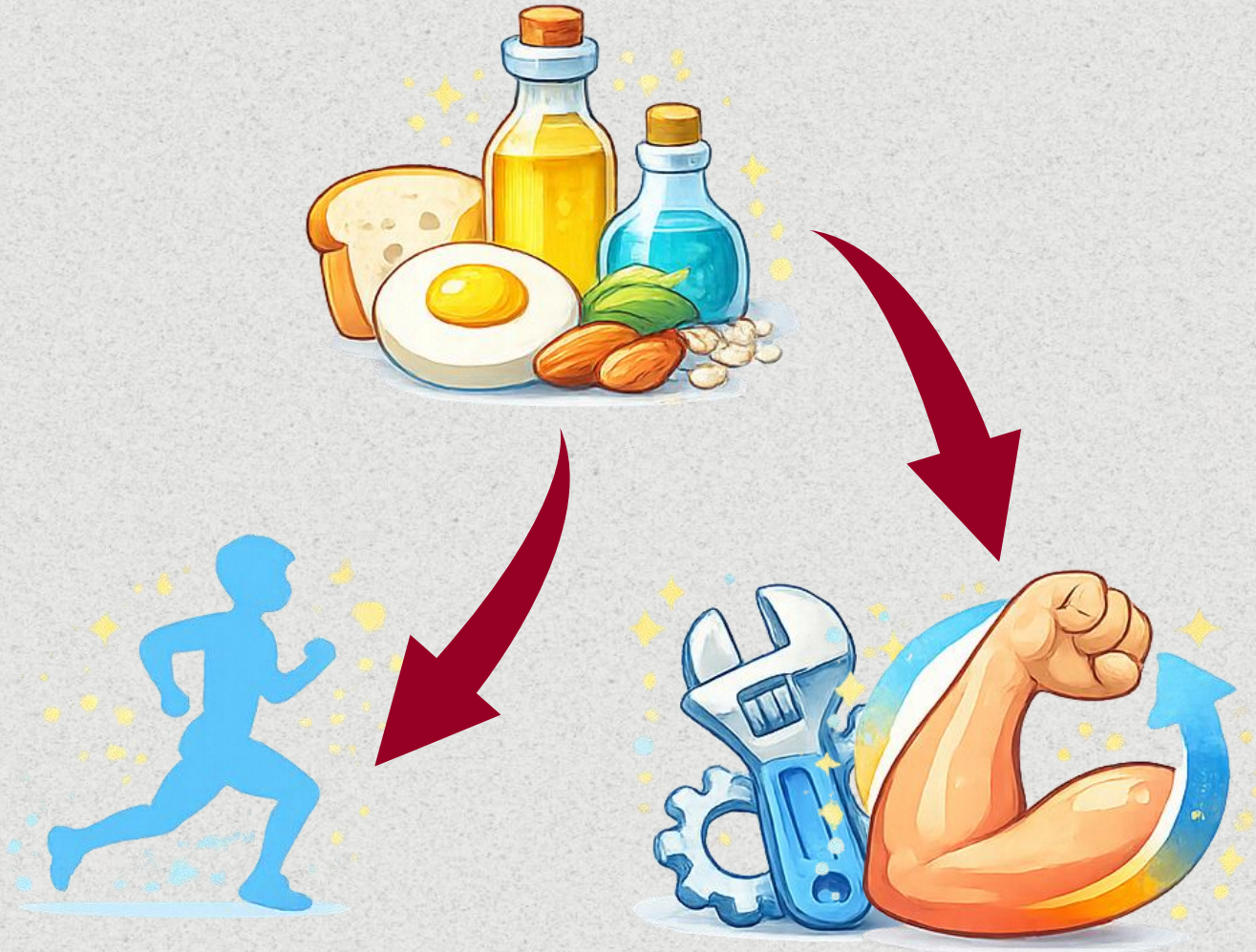
Why macronutrients matter:

Macronutrients — carbohydrates, proteins, and fats — are the pillars that sustain every training session, sprint, and jump.

They are not concepts reserved for nutritionists. Every coach should understand what happens to athletes across a week of work.

Without adequate macronutrients, a young athlete risks:

- Feeling constantly tired
- Recovering slowly
- Declining quality of training over time



Carbohydrates: the immediate fuel for sport

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Muscles use mostly carbohydrates during intense activity. When they are scarce, training quality drops: athletes struggle to maintain pace and lose focus.



Not all carbohydrates are equal:

- Simple sugars → absorbed quickly; useful during long, intense sessions
- Complex carbohydrates → absorbed slowly; essential in main meals throughout the day



For adolescents with busy days and afternoon training, complex carbohydrates must be regularly present in main meals.

Proteins: building, repair, and growth

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Every training session produces small 'controlled damage' to muscle fibres. Proteins repair this damage, making tissue stronger.

What matters is distribution, not just quantity:

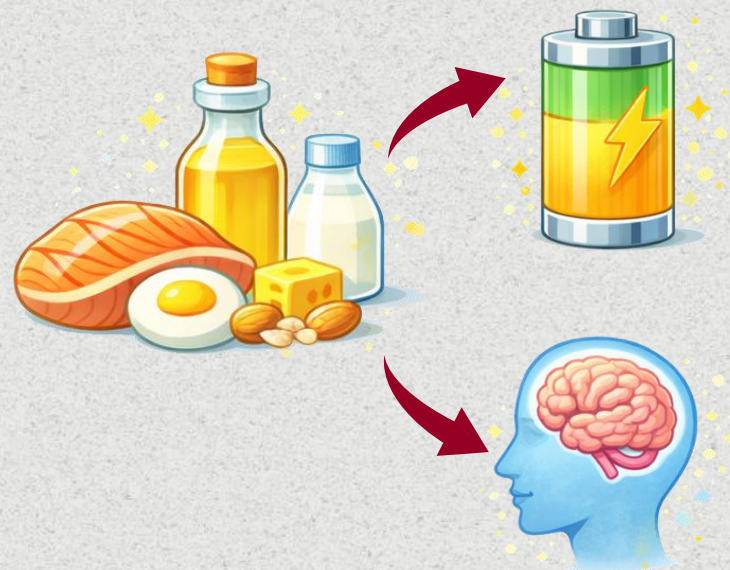
- Spread protein across all meals, including breakfast
- Avoid concentrating protein only at dinner

Good sources:

- White meats, fish, eggs, dairy, legumes, nuts — alternate across the week
- Cereals + legumes combine to form complete plant proteins



Fats: long-term energy and hormonal support



Fats: essential, not an enemy

Good-quality fats contribute to hormone synthesis, brain health, and energy during prolonged or moderate-intensity activity.

Best sources during growth:

- Extra-virgin olive oil
- Fish (omega-3 fatty acids)
- Nuts and seeds

The key message: not 'don't eat fats', but 'choose them well'. Eliminating fats can destabilise the metabolic balance of a young athlete.



Putting all together: a balanced plate



A balanced plate in real life:

Breakfast:

- Wholegrain cereals + yogurt or milk + fruit → complete base for the morning

Lunch:

- Carbs like pasta or rice + protein source + vegetables → fuel and repair material

Dinner:

- Closes the nutritional circle; supports overnight recovery

Snacks:

- Simple and digestible; avoid long fasting periods before training

The coach's role in daily eating habits



Small interventions, big impact:

A coach can enormously influence young people's approach to food without turning training into a nutrition class.

- Talk about the importance of the pre-training snack
- Remind athletes not to skip breakfast
- Point out how fatigue is often linked to irregular eating



A young athlete with a balanced presence of carbohydrates, proteins, and fats across three main meals trains better, recovers faster, and is less prone to injury.