



SPEED PROJECT

Sport & Prevention of Emerging Eating Disorders

Meal and snacks timing

Prof. Marco Malaguti

Dept. For Life Quality Studies – University of Bologna



Funded by
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Why “when” matters as much as “what”

Timing is an invisible part of performance:

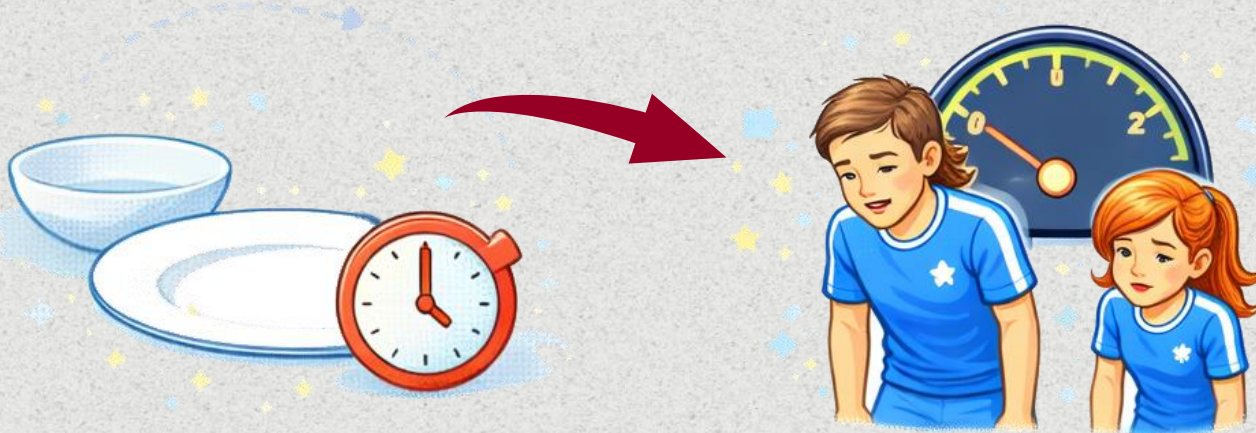
When it is right, training flows. When it is wrong, early fatigue, digestive difficulties, and poor concentration are felt.

Adolescents have full days — variable school schedules, long commutes, extracurricular activities. This makes distributing meals complicated, yet fundamental.

The body needs regular small refuelling to function at its best.



When eating at the wrong moment



Skipping meals = early fatigue



Two common mistakes:

Skipping or eating too lightly:

- The body faces the session on a 'nearly empty tank': early fatigue, poor technical quality, and slow recovery

Eating too close to training:

- Digestion is still in progress: heaviness, nausea, or breathing difficulty
- Blood is engaged in digestion and cannot adequately support muscles and brain

Timing, more than quantity, often determines the quality of training.



The 'last planned refuelling':

- Pasta with simple dressing (oil, Parmesan) + small portion of chicken or fish + well-tolerated cooked vegetable
- Easily usable carbohydrates + useful protein + limited fibre

An illustration of a blue smartwatch with a white screen displaying '2 hrs'. To its right is a blue and white yogurt container with a spoon, a yellow banana, and three round, golden-brown crackers. The background is light gray with scattered yellow and blue star-like shapes.

The right snack: a practical example



When the gap is 4+ hours:

A pre-training snack is important — simple and digestible. No sports products needed: common choices work best.

Example (60 min before training):

- A piece of fruit + a carbohydrate-rich food (e.g. a plain biscuit, bread, rice cake)

How to know if it works:

- Steady energy and no heaviness or early hunger → right choice
- Nausea, cramps, or sharp energy drops → adjust quantity or timing

Recovery: what happens after training



Recovery



The post-training recovery window:

After training the body absorbs nutrients more efficiently. It is the ideal moment to replenish what has been consumed and prepare for the next session.

A snack combining carbohydrates + proteins:

- Rebuilds energy stores and restores muscle fibres

If training ends in the late afternoon:

- No snack needed — a complete dinner with complex carbohydrates, protein, vegetables, and fruit provides everything for overnight recovery

The coach's role: creating functional eating routines



Building functional eating routines:

A coach does not control what young people eat, but can guide them towards more functional habits:

- Stress the importance of a full breakfast
- Suggest planning the afternoon snack in advance
- Point out how training quality depends on available energy



Meal timing is part of sports education: teaching that the body has rhythms, and that respecting them allows better training, faster recovery, and feeling stronger.