

Nutrition Guide for Gymnasts & Their Parents

Supporting Performance, Recovery, and Long-Term Health

Based on a Saltire Team Gymnastics Parental nutrition study (Lonie, 2025)

1. Fuel for Performance:

Gymnastics is a high-intensity sport requiring strength, power, flexibility, and focus. Nutrition is key to support energy, recovery, and growth.

Macronutrient Breakdown:

Carbohydrates –

The primary energy source found in oats, potatoes, pasta, bread and fruit.

Protein –

Essential for muscle recovery and repair found in dairy, lean meats, eggs, tofu, and beans.

Fats –

Providing sustained energy and hormone support found in avocados, seeds, nuts, and olive oil.

Micronutrients:

Calcium & vitamin D –

Build strong bones, prevent stress fractures, found in dairy, leafy greens, eggs, and fortified cereals.

Iron –

Supports oxygen transport and helps reduce fatigue, especially important for growing athletes, found in foods like red meat, poultry, fish, beans, lentils, and leafy greens.

2. Hydration Strategies

Staying hydrated is essential for gymnasts' focus, muscle function, and endurance. Even mild dehydration can lead to fatigue, headaches, poor concentration, and reduced performance.

Key Tips:

- Sip water regularly through the day – not just during training.
- Bring water to every session and sip between rotations.
- Use electrolyte drinks for longer sessions to replace lost salts.
- Avoid sugary or caffeinated drinks like energy drinks – not suitable for young athletes.

3. Pre- & Post- Training Snacks

Nutrient timing enhances energy, performance and recovery.

Pre-Training (1-2 hours before):

Fuel with carbohydrates + a little protein for energy and focus.

Examples:

- Toast with peanut butter and banana
- Fruit smoothie with oats and milk
- Low-fat yogurt with granola
- Crackers with cheese and grapes

Post-Training (within 30-60 minutes after):

Focus on carbohydrates + protein to refuel muscles and speed up recovery.

Examples:

- Chocolate and flapjack
- Chicken wrap with salad
- Tuna with pasta salad
- Greek yogurt with berries and honey

Skipping meals after training can slow down recovery and increase injury risk – aim for quick, easy, and balanced snacks.

4. Be Aware of Under-Fuelling (RED-S)

RED-S (Relative Energy Deficiency in Sport) occurs when a gymnast doesn't eat enough to meet their energy needs. This can lead to:

- Fatigue
- Frequent illness or injury
- Hormonal issues (e.g., missed periods in girls)
- Slower recovery and impaired performance

Prevention Tips:

- Ensure 3 balanced meals + 2-3 snacks per day
- Prioritise energy-rich foods (e.g., full-fat dairy, nuts, dried fruit)
- Watch for mood changes, fatigue, or injuries as possible warning signs.

Parent Challenges:

- Not enough time to cook between school and training.
- Fussy eaters – do not like the usual 'healthy foods'.
- Not eating enough prior to training.

Tip: Keep a go-to list of quick-prep meals and snacks your gymnast *will* eat – consistency beats perfection.