

## FACT SHEET

### FOOD FOR YOUR SPORT - GYMNASTICS

#### ABOUT GYMNASTICS

Gymnastics is a dynamic sport that incorporates seven disciplines; men's and women's artistic gymnastics, rhythmic gymnastics, trampolining, sports aerobics, sports acrobatics and cheerleading.

Training times vary but most competitive gymnasts train a minimum of 3 times per week for at least 3 hours at a time. These sessions incorporate skill development, strength and flexibility training, and sometimes ballet for precision and fine-tuning. Elite gymnasts will train for over 30 hours per week during morning and evening sessions.

National Championships for Rhythmic Gymnastics and Men's and Women's Artistic Gymnastics are usually held in May, Trampoline in July, Sports Acrobats and Cheerleading are in September and Sports Aerobics in October. Competitions usually have an hour warm-up and competition time can last over 3 hours. During this time, some disciplines will practise their skills/routines repetitively, while others will rest between routines.

The progressive difficulty of gymnastic skills over the past 50 years has increased the physical demands and acrobatic nature of the sport. Today's elite female gymnasts are small, lean (low percentage body fat) with high muscularity, which lends itself to a high power-to-weight ratio. Elite females peak before puberty and are ready for international competition at the minimum age requirement. Male characteristics have also changed over the years and are now smaller, leaner and more heavily-muscled. Male gymnasts are ready for elite competition in their twenties when their muscle mass peaks.

#### TRAINING DIET

Due to a heavy training schedule, it is important for a gymnast to have the right training diet. Gymnasts are highly susceptible to being "run down" in the lead-up to important competitions, or can suffer from fatigue at training leading to serious injury. In addition, gymnasts are usually quite young with many preferring small frequent meals to meet nutritional requirements and to fit into their busy schedules of school, homework and long hours of training.

Ideas for nutrient-rich snacks can be eaten in the car between school and training include:

- Yoghurt & fruit
- Fruit scrolls or muffins
- Low fat flavoured milk
- Sandwiches w nutritious fillings
- Crackers with low fat cheese or tuna

Low body fat levels are advantageous in gymnastics, for agility, dynamic power and technique. However, excessive dieting can lead to health and performance issues. It is important that a positive body image is developed in these athletes. Parents, coaches and other support staff should have this goal in mind when discussing body composition, and ensure to get professional advice where required. Meals and snacks should be nutritious, while 'extras' (e.g. chocolate, cakes, chips, biscuits) should be limited as they provide little nutritional value while providing much energy. Some other tips to help manage weight are to:

- Eat small, well-timed snacks over the day can prevent over-eating later on
- Choose high-fibre, protein containing meals and snacks to help manage appetite
- Avoid eating for "non-hungry" reasons (e.g. boredom)

#### FLUID NEEDS

Despite training indoors, gymnasts need to keep their fluids up during training to prevent dehydration that can lead to poor performances. During training sessions water should be the main fluid but sports drinks may be helpful during long or very intense training sessions and competition as it also provides carbohydrates for active muscles.

#### EATING BEFORE COMPETITION

Gymnasts usually prefer a light meal that is easy to digest to avoid gastrointestinal upset from fast movements and flips. A meal low in fat and high in carbohydrates for energy is ideal, consumed 2 hours before warm-up, such as:

- Sustagen Sport (ready-to-go packs available)
- A piece of fruit + 200g tub of low fat yoghurt
- A bowl of breakfast cereal + low fat milk

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#### EATING AND DRINKING DURING COMPETITION

Competitions often interrupt one to two main meals (e.g. 8am - 2pm) and extra carbohydrate intake is essential for replenishing stores. Yoghurt, fruit bars, and fruit are ideal snacks for between routines to maintain energy levels and mental stamina. A sports drink is also ideal to sip on as it replaces carbohydrate and fluid at the same time. Avoid high fat foods as these are slow to digest.

Foods and fluids during competition need to be easy to consume as nerves can be difficult to handle during competitions. Gymnasts should pack foods that they like and that sit well in the stomach, like jam sandwiches or canned fruit. And be prepared! Don't rely on what's available at the venue (meat pies and sausage rolls are not the best fuelling options!).

#### WHAT ABOUT RECOVERY

State, National and International competitions are held over a few days so gymnasts need to ensure that a recovery meal is eaten immediately after cooling down. This should be taken into consideration when planning the daily meals. For example, fruit and yoghurt, sandwiches, sports drink and raisin bread slices are all suitable recovery snacks that are easy to carry around. It is also important to include a lean protein source in recovery for muscle tissue repair and growth. After competing, a high-carbohydrate snack should be followed by a more substantial meal containing carbohydrate and protein. It is also a good time to encourage plenty of fluids.

#### OTHER NUTRITION TIPS

Gymnasts (and parents) need to be organised and pack snacks for before and during training. Water bottles are also a good item to have in the gym bag to make sure plenty of water is consumed during training and on the way home or to school.

Low iron can be a problem with female gymnasts, particularly elite gymnasts who train long hours. If you are often tired / fatigued, ask your doctor for a blood test to check your iron levels. For more details see the Iron depletion in athletes fact sheet.

Eating Disorders can be an issue with some gymnasts. Care should be taken to encourage gymnasts to eat healthy but not be restrictive in their eating. A wide range of foods should be eaten so that all nutrients are obtained regularly. Advice from a Sports Dietitian may be helpful.

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