Steelformers Around the Mountain Relay

What you eat and drink is important as nutritious foods can help you meet your energy requirements, support you mental health; bowel health and your immunity. When you start training for an event like Steelformers Around the Mountain Relay you also need to factor in your additional needs to fuel your training, the actual event and your recovery.

Carbohydrates
Our brain needs glucose. Carbohydrates are the most easily digested macronutrient and are broken down and absorbed into the bloodstream as glucose. This means the type, timing and amount of carbohydrates you consume can impact your cognition. Carbohydrates can be stored in the muscle and liver as glycogen. Carbohydrates can also be a good source of fibre and prebiotics and therefore promote bowel health.

Protein:
Our muscles need protein. Protein provides our muscle cells with the amino acids they need to rebuild after daily tasks and exercise. This means protein plays an essential role in muscle recovery. Protein also helps to keep us full and to produce enzymes and hormones.

Fat:
Our bodies need fat. Fat provides us with essential fatty acids, helps us absorb some vitamins, produce hormones and can lower the risk of heart disease.
Fat also helps to keep us full and makes our meals taste great.
In regards to sports nutrition be mindful of the fat content of foods as it can cause gastrointestinal discomfort, and delay the uptake of carbohydrates and protein. Consult a Sports Dietitian if you have queries around what is an appropriate intake/day.

Training:
If you're training for longer than 90 minutes you should top up your glycogen (stored carbohydrates) levels In order to prevent muscle fatigue, maintain power output and cognition. General recommendations are to consume between 30 - 60grams of carbohydrate per hour from food sources, sports supplements/gels and drinks.
If you are training for longer than 3 hours then up to 90g/hour may provide additional benefit. This should be consumed as a mixture of glucose and fructose and will need to be practiced during training, especially if you have a sensitive stomach. Consult a Sports Dietitian for further information.

Leading up to the event:
The body only has a limited supply of carbohydrate in the muscles and liver. Since carbohydrate is main source of fuel for the body during high intensity exercise, muscle fuel stores should be topped over in the 24-36 hours before competition to enhance endurance performance. On the day of the relay chose foods rich in carbohydrates and low in fat and fibre to aid digestion and prevent stomach issues. If you are nervous or if solids don't sit well then a liquid carbohydrate (e.g. smoothie) is a good alternative.
The pre-race meal should ideally be 2 - 4 hrs before starting the race, low in fat, low in fibre and practised beforehand to ensure it sits well.

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Ideas could be:

- Weetbix or porridge with milk and fruit
- Marmite on toast with a glass of milk and fruit
- Rice based dish (e.g. risotto)
- Pasta with lean beef mince in tomato-based sauce
- Fruit smoothie

A smaller snack may also be eaten 1-2 hours before. Some suitable pre-race snack ideas include:

- Creamed rice
- Yoghurt with banana
- Fruit toast with peanut butter
- Muesli bar + fresh fruit

Hydration:

The aim is to start any session well hydrated. This requires drinking regularly throughout the day, leading up to training or competition. Make sure you know where drink stations are located or where support crew will be if you need to refill your fluid supply.
Failing to replace sweat losses can negatively impact cognitive performance and reduced power output.
The general recommendations are to replace 600ml/hour plus more according to thirst.
Factors which impact fluid losses include temperature, wind, sweat rate, training intensity, duration and altitude.

How to work out your sweat losses:

1. Weigh yourself before and after a training session in as little clothes as possible.
2. If you lost 1kg then aim to replace 1.5L of fluid ASAP (factor in how much fluid you drank during the session)
3. Repeat method again in different conditions i.e. warmer weather

Sports Drinks:

Sports drinks can simultaneously replace fluid, carbohydrates and electrolytes that are lost. Most sports drinks contain 6 - 8g of carbohydrate/sugar per litre, have a sodium content between 500 - 700 mg/L and should also contain potassium. Other added ingredients like vitamins, minerals and herbal ingredients are unlikely to directly improve performance but may affect the palatability, and subsequently the overall fluid intake.

Caffeine

A Sports Dietitian can help you to be use caffeine strategically to help your performance.

Recovery:

Recovery meals and snacks should contain carbohydrate (fuel), some protein (for muscle repair and development) and fluids and electrolytes to replace sweat losses. Nutrient rich-choices are important to help reduce inflammation and support immunity. If you experience a supressed appetite or gastrointestinal problems then fluids may be preferred (e.g. fruit smoothies, flavoured milk).

Other recovery food suggestions include:

• Bircher muesli with fruit, milk, nuts and seeds
• Chicken, avocado and salad sandwich and a piece of fruit
• Burritos with beef, cheese, avocado and salad

Alcohol and caffeine containing drinks may impair fluid rehydration. If you intend to drink either of these ensure you fully rehydrate first. If you have sustained injuries, alcohol can be particularly damaging.

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