

FACT SHEET

MOTOCROSS

ABOUT MOTOCROSS

Motocross is one of many motorcycle sports, including motorcycle racing, track racing, rally, enduro and trials.

The sport originated in the UK in the 1920's and was initially known as "scrambling"- off road events held across difficult terrain. It subsequently spread throughout the world, with the refinement of bikes and the development of sub disciplines of motocross including, supercross and arenacross (held at indoor arenas), freestyle motocross (focused on jumping and aerial skills), supermoto (races held on and off road), and vintage motocross (bikes that were made pre 1975).

Motocross riders need a high level of cardiovascular fitness, as they need to be able to control a 90kg (or heavier) bike on top of maintaining top speeds during a race. In addition to quick reflexes, riders also deal with inertia and gravitational forces, making balance and strength important requirements for the sport. Weight training is an important part of preparation, incorporating core strength and all other muscle groups for strength on the bike.

Riders have to wear riding gear that is tough, heavy, uncomfortable, and very hot. Upper body clothing consists of a single layer of a light weight top, plus an armour system, gloves, helmet, goggles and neck brace, whilst lower body includes two layers on the legs with big knee braces and heavy boots.

TRAINING NUTRITION

Motocross riders are committed athletes, and so a good training diet should supply adequate carbohydrate to match energy needs, moderate amounts of protein and fat, as well as supplying enough vitamins and minerals. The benefits of good nutrition include increased mental clarity and better reflexes, increased energy and stamina, and improved performance in training and competition.

Motocross riders have busy training schedules with multiple sessions throughout the week. They therefore need to focus on nutrient-dense foods such as cereals, fruit, vegetables, low-fat dairy products, lean meat/poultry/fish or vegetarian alternatives. The timing of meals also needs to be well planned to coincide with recovery between sessions. Quantities of food consumed should adhere closely to training intensities. On heavy training days for example, extra snacks are needed to fuel higher training loads in contrast to lighter/rest days where less food may be sufficient. This not only ensures adequate energy to meet training demands but also assists in maintenance of optimum body composition and prevention of unwanted gains in body fat. Other common issues that need to be addressed include excess fat consumed from takeaway and fast foods, as well as alcohol

consumption. An Accredited Sports Dietitian can help tweak your energy and macronutrient needs based on the demands of your training.

FLUID NEEDS

Fluid needs can be high, due to the amount of riding gear that is worn. In humid conditions, sweat evaporates slower and so more fluid is needed. Keeping track of individual fluid losses is important to avoid overheating and dehydration. Fluid losses greater than 2% body mass (1.1-1.5kg for a 75kg rider) can negatively affect both physical and mental performance as the body is less able to cool itself.

Training is a good time to establish hydration habits and monitor changes in day-to-day fluid losses under different conditions. Riders should weigh themselves before and after training sessions and competitions (in minimum clothing, towed off) to estimate fluid losses. Every 1 kg lost, generally represents 1 L of fluid lost. For more details see the Fluid in Sport factsheet.

Sports drinks are useful to provide fuel as well as fluid during training and competition. Research shows that carbohydrate intake may enhance performance by increasing endurance and delaying the onset of fatigue. However, drinking fluids with a carbohydrate concentration > 8g/100ml (e.g. soft drinks, energy drinks and fruit juice) during exercise delays gastric emptying and slows fluid delivery. Therefore sports drinks or water are the best choices during riding, especially in hot environments where fluid demands are high.

EATING BEFORE COMPETITION

Food available at race venues often consists of a typical takeaway menu (deep-fried food, hamburgers, hotdogs, pies, etc). These high-fat, energy-dense options are not ideal so plan pre-race meals ahead. The main pre-event meal should be eaten 4 hours prior to competing, to allow time for the stomach to empty

Top up on small, high carbohydrate snacks and fluids between competition and whilst waiting to ride.

Suitable pre-event meal options include:

- Cereal, toast with a glass of low-fat milk/juice
- Baked beans on toast with a glass of low-fat milk/juice
- 1-2 meat/cheese and salad sandwiches/rolls with a sports drink



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For those who struggle to eat before competition because of pre-race nerves or anxiety, could try lighter options such:

- Smoothie with your favourite fruit (e.g. banana, strawberry or blueberry)
- Sustagen® Sport and a banana
- Juice and a couple of cereal bars
- Breakfast meal replacement drink and a banana

Pre-competition hydration is important so aim to start a race well-hydrated. Monitoring the color of your urine can be a good self-assessment tool, which should be of clear to pale yellow.

EATING AND DRINKING DURING COMPETITION

Riders should take advantage of breaks in racing to top up on fuel and fluids and high carbohydrate, low fat foods and fluids. Food available at the track often consists of a typical takeaway menu so it's wise to pack suitable snacks rather than rely on poor quality canteen options. Water and sports drinks are better options than soft drinks and caffeinated energy drinks. Hydration systems such as Camel Packs may help to aid fluid intake during racing. Snacks for multiday motocross events include:

- Sports drink
- Juice
- Pieces of fruit
- Honey or vegemite sandwiches
- Yoghurt
- Banana sandwich
- Packet soup + bread
- Low fat hot chocolate and marshmallows in cold environments

RECOVERY

Recovery after training and competition can be enhanced by consuming a meal or snack containing carbohydrate to replace muscle glycogen stores; protein to speed up muscle repair and fluid to replace sweat losses. Ideally a recovery meal or snack should be consumed within 30-60 minutes of finishing training or competition. This is particularly important when after long training sessions or during multi-day competition. A snack followed by a meal of carbohydrate and protein provides the necessary components for recovery. Some recovery snack ideas include:

- Sandwich with meat, fish or cheese with fluids
- Yoghurt and fruit with fluids
- Milkshake, Fruit Smoothie or flavoured milk tetra

OTHER NUTRITION TIPS

- Some athletes also consume caffeine in the form of cola drinks, tea, coffee energy drinks to help prevent fatigue, especially when they feel their "energy levels are low". Athletes who do this should inform themselves about the beneficial and detrimental effects caffeine in various forms and amounts can have so make an informed decision on using it.
- A multivitamin/mineral supplement may be indicated when travelling to environments with unfamiliar foods and fluids, and/or extreme environmental conditions.

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