

## FACT SHEET

# FOOD FOR YOUR SPORT – CrossFit®

### ABOUT CrossFit®

CrossFit® is a core strength and conditioning program created in 2000 by Greg Glassman and has gained widespread exposure since 2007 when CrossFit® started holding annual international competitions. These competitions are designed for athlete participants that can do all workouts of competition as prescribed and require no scaling options, also known as RXD athletes. It combines aerobic and anaerobic resistance exercises that incorporate high-intensity interval training, Olympic weightlifting, powerlifting and gymnastics. Workouts are designed promote strength, endurance and flexibility in a short time through constantly varied movements that stress multiple energy systems at high intensity with little rest. Workouts last from a few seconds to 20-30 minutes.

A typical “workout of the day” (WOD) is carried out at affiliated gyms or “boxes” with performance of each WOD scored and/or ranked. A box usually has a whiteboard used for keeping scores and records of the WODs, a running clock and a define set of rules and standards for each performance.

Individuals who want to test their fitness against others in the world of the same age and gender to find the ‘fittest on earth’ can enter the CrossFit® Games. The Games season is broken up into three stages: Stage 1 is the Open. This is a five-week, five workout competition held at the beginning of the year in affiliates and garage gyms around the world. This is open to any individual who is at least 14 years old. The top athletes in 17 regions of the world enter the second stage – the Regionals. Regionals are a three-day event held around May each year. The top athletes from 2 or 3 regions combine and compete for five qualifying spots in the CrossFit® Games. From around the world, the top 40 men, 40 women, 40 teams, 40 teenagers and 200 masters then enter the CrossFit® Games in July each year. Through a series of unknown workouts and events to the athletes, the Games distinguish the fittest athletes.

CrossFit® training is growing at a rapid rate with over 130,000 affiliated boxes, and expected to continue to increase. The majority of boxes are located in the USA.

States.

### TRAINING DIET

Nutrition is a foundation for fitness and health for CrossFit® and is viewed as the basis for physical movements. The CrossFit® dietary prescription focuses on macronutrient ratio prescription of foods following the Zone Diet (e.g. 40:30:30 ratio of carbohydrates, proteins and fats) and quality of foods through the Paleo Diet (e.g. elimination dairy, grains and legumes). Both of these diets focus on consumption of whole foods and elimination of processed foods whilst promoting a high protein, low carbohydrate intake. The rationale for this prescription is that it allows for a “reduced caloric intake and provides ample nutrition for rigorous activity”. However, there is no creditable scientific research of the Paleo and Zone diets in conjunction with a short term, high intensity workout such as CrossFit® result in superior performance. Changes to weight or body composition with these diets is likely due to the energy deficit produced as opposed to the macronutrient ratio.

These diet approaches of a “one size fits all” are not a key component of sports nutrition guidelines which focuses on an individualised approach to nutrient needs. Individuals participating in CrossFit®, are encouraged to work with an Accredited Sports Dietitian to determine an appropriate carbohydrate intake based on training volume and body size of the individual as opposed to a percentage of total energy intake (as occurs in the Zone diet). This individualised approach supports training, performance and body size of athletes more than “one size fits all” methods.

### FLUID NEEDS

Regardless of workout duration, drinking fluid beforehand is important for optimising hydration status and preventing dehydration. Hydration levels can be easily assessed by urine colour - aim for a pale yellow-clear colour. Fluid intake during a workout can counteract fluid losses particular in workouts lasting greater than 30 minutes.

For low intensity and short duration workouts, plain water is an effective drink for fluid replacement. For high intensity and longer duration activities, carbohydrate and electrolytes (including sodium) can be added to water (e.g. sports drinks). This can provide palatability of fluids and replace electrolyte and carbohydrate losses.

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## EATING BEFORE COMPETITION

A CrossFit® competition event involves multiple workouts over a series of heats; potentially over consecutive days. In some events the exact workout or start time maybe unknown, making planning more difficult.

Generally it is recommended to eat a carbohydrate rich meal or snack 2-4 hours before the first workout. In some circumstances this may not be possible and an alternative plan maybe to graze on lots of small snacks between workout events. However, grazing may not completely meet nutritional needs thus a larger meal or snack may need to be strategically consumed on the longest break. It is ideal to practice competition nutrition strategies during training to determine what foods agree and don't agree with the digestive system.

Fluid intake is also just as important as food intake. Dehydration can affect performance particularly with multiple workouts over a several days. Aim to start competitions well hydrated and drink regularly throughout the day. Keeping fluids cold will increase palatability, and sports drinks can help replenish carbohydrates plus fluids.

Other factors affecting food and fluid choices are the ability to pack your own supplies including ability to keep foods fresh and cold and having protective containers for fragile foods (e.g. sandwiches, bananas, etc). Food venues maybe available but have limited selection of foods and fluids. Packing a surplus and a variety of food/fluid options ensures the ability of nutritional needs being met.

Some suggested food/liquid choices include:

### 2-4 hours:

- Cereal with milk
- Yoghurt and fruit,
- Pasta with vegetables and meat
- Sandwich and fruit

### 1-2 hours:

- Smoothie
- Fresh or dried fruit
- Juice
- Simple sandwiches (e.g. vegemite or cheese)

- Sports bars

### Between workouts, less than 1 hour:

- Sports drink
- Fruit
- Sports gels
- Smoothies

These foods are generally more tolerable when there is limited time between workouts. If suffering from stomach upset, liquid meal supplements provide a great solution to quickly get nutrients in with less risk of stomach upsets.

## RECOVERY

Nutrition recovery after competition or between competition days focuses on refuelling, repairing and adaptation and rehydration. Carbohydrates, protein and fluids are particularly important in the post workout phase. Intake of food and fluids within a couple of hours of the last workout helps to promote recovery. Food choices should consider appetite and access to food/fluids.

Suggested post recovery nutrition ideas include:

- **Liquid Base:** Fruit smoothies, Liquid meal supplements, Flavoured milk
- **Non-liquid Base:** Fruit and nuts, Sandwiches with lean protein & salad, yoghurt and berries, grilled salmon with sweet potato and salad

## OTHER NUTRITION TIPS

- **Carbohydrates** Matching carbohydrates to workout days and non-workout days will help to optimise performance, body composition and prevent fatigue
- **Fatigue** It is not uncommon to experience temporary fatigue as the body adapts to workouts. Fatigue may also be attributed to nutritional factors including insufficient energy and/or carbohydrate, dehydration and low iron. Addressing these relevant nutritional areas can increase energy levels and result in better performance
- **Protein supplements** Obtain protein through wholefoods is the priority, focusing on timing and quality of protein. If wholefoods are not appropriate to meet requirements, an Accredited Sports Dietitian can help to identify appropriate protein