

## CARBOHYDRATE SUPPLEMENTS

Although regular meals provide majority of carbohydrate needs, sometimes there is need for carbohydrate supplements. Carbohydrate supplementation during intermittent exercise specially beneficial for individuals beginning exercise with low glycogen stores due to a poor diet, illness or disruptive travel and training schedules. Replenishment of carbohydrate during and after exercise training sessions can be accomplished by drinking specially formulated sports drinks.

Liquids are generally easier to consume than solids, liquid meals and snacks can be helpful in meeting high energy needs. Cereal and milk is a quick snack anytime of the day.

Fruits, milk, yogurt and soya drinks provide their carbohydrate in the form of sugars. Some sweeter vegetables also contain sugars. Fruits and vegetables are good sources of antioxidants hence should be included in the diet. Added sugars provide only empty calories. High sugar foods can displace more nutritious foods from the diet. An active person cannot have large quantities of soft drinks. Sweetening agents do not interfere with sports performance.

Some carbohydrate supplements are available in the form of gels or powdered sugars. Generally, these are glucose based carbohydrate. Gels are very popular with cyclists and other endurance athletes. Glucose drinks and carbohydrate supplements are convenient to use.

There is great range of food bars available, As a general rule, any food bar providing less than 4 g of fat and more than 20 g of carbohydrate is a good choice. Nutritious food bars also provide 1-3 g of fibre and 2-5 g of protein.

Food bars are convenient for pre and post event snacks because they don't need refrigeration. Bars are not a substitute for meals, just a quick and handy snack before having the next meal.

Nutrition bars provide high carbohydrate > 60 per cent of total calories with minimal fat and protein; minimal to moderate carbohydrate 20-55 per cent of total calories with balanced and protein (approximately 30 per cent each) Those which are high in carbohydrate are best for ingestion during before, and after exercise.

Fruit bars, breakfast bars sports bars even chocolate bars can meet carbohydrate requirement. Energy bars that contain more than 5 g fibre should not be ingested prior to or during exercise because fibre slows digestion.

For a snack food, high-fibre bars can be good choices because fibre delays hunger pangs. Energy bars can serve as a convenient, effective fuel source but they are engineered food and should not replace the groupings in the food pyramid.

Eating nutritious carbohydrate foods and fluids is all that is required to keep the muscles well fuelled.