NUTRITION FOR MIDDLE DISTANCE

Middle distance events are held on the athletics track and include 800 m (2 laps), 1500 m (3 laps) and 5 km (12 laps). Weekly competitions are held over summer with the major events towards the end of the season. Not all runners will compete weekly, in fact it is more common to race less regularly and increase the number of races at the end of the season in preparation for a specified championship. Middle distance running combines the use of both aerobic and anaerobic energy systems and requires athletes to possess a high level of speed endurance.

Training

Training for middle distance events varies widely depending on the phase in the competitive season and the strengths of the athlete. Total mileage can vary between athletes and may include one to two workouts a day of four to twelve kilometre track sessions, easy runs and tempo running. In addition, many of these athletes will undertake gym sessions to develop extra strength and muscular endurance. Some runners include stretching sessions, yoga, and Pilates to aid in recovery.

Physical Characteristics

Middle distance runners are typically of medium height, and very lean and muscular. These athletes need to have a good power-to-weight ratio, but also need to possess a low absolute body fat level.

Common Nutrition Issues

Training Nutrition

Middle distance runners need to consume diets high in carbohydrate to replace the stores that are used during training but also need to be mindful of maintaining low body fat levels. Diets need to be nutrient-dense and carbohydrate-rich. This is best achieved by including a wide variety of nutrient-dense carbohydrate sources such as bread, cereal, fruit, vegetables and dairy products in the diet. Appropriate snacks should be included before and after training to maximise performance during training and to promote recovery. Snack foods such as yoghurt, fresh fruit, low-fat flavoured milk and sandwiches are all nutritious fuel foods. Most middle distance runners (even elite) will combine full-time employment or study with training. Training can take up many hours leaving little time to think about obtaining and preparing healthy meals. Athletes need to be organised to ensure the shopping can be done regularly and that the pantry is well stocked. A successful plan is to shop weekly from a shopping list with the required items for recipes to be prepared in the coming week. Leftovers during the week can be frozen for nights when training finishes late or athletes are too tired to cook. Some commercial frozen meals are now catering for active people and are useful to have stored in the freezer for these occasions.
Physique

Middle distance runners require low body fat levels whilst being strong and muscular. These athletes are often conscious of their diet in an effort to keep body fat levels low. Runners needing to reduce their body fat level should target excess kilojoules in the diet. In particular, excess fat, sugary foods and alcohol can add unnecessary kilojoules and would be better replaced with more nutrient-dense foods.

Fatigue

A common concern for the middle distance runner is fatigue. There are many misconceptions surrounding why fatigue might occur and how athletes should handle it. Fatigue can be a natural consequence of training or an over committed lifestyle, however nutritional reasons should not be underestimated. Low-carbohydrate diets, inadequate iron intake, skipping meals, inadequate fluid replacement and poor food choices can all cause fatigue. Runners should ensure that they make time to adopt healthy eating patterns and avoid cutting out entire food groups from their diet without appropriate substitutions. Replacing fluid between training sessions is also very important.

Fluid

Many runners claim to feel heavy if they consume large amounts of fluid during training and as a result fail to hydrate adequately while exercising. Athletes should be encouraged to sip small amounts of fluid regularly at training, but also have plenty of fluids between repetitions or in gym sessions. Carrying a bottle around during the day will help to reach fluid goals between sessions.

Iron

Middle distance runners are particularly susceptible to low iron status for various reasons. Some of these include iron losses in sweat, gastrointestinal bleeding which may occur through heavy training or anti-inflammatory use, low dietary intake of well absorbed iron, menstrual losses in females and damage to red blood cells through mechanical and capillary trauma.
If in doubt, athletes can have iron levels checked by a sports physician. In addition, a sports dietitian will be able to help athletes to increase their intake of iron-rich foods that are well absorbed by the body. Plant-based iron foods such as green vegetables, are not absorbed as effectively animal-based iron foods such as meat.

Supplements

Some runners try to replace sound nutritional practices with vitamin pills, protein powders and liquid formulas. Popping a pill is not a quick fix to feeling flat and run down. Rather, it is necessary to address the issue of taking time to eat well and organising an appropriate training program with adequate rest. Addressing lifestyle habits and putting good healthy eating in place will be more useful than expensive pills. Some supplements can help in certain situations, but this is best assessed by a sports physician and/or sports dietitian.

This fact sheet is based on AIS / National team athletes and is therefore specific to these athletes. Written by AIS Sports Nutrition, last updated January 2010. © Australian Sports Commission.