Characteristics of Basketball

A basketball game can be played in four 12 -minute quarters, or in two 20-minute halves, with a break of 10-15 minutes at half time. Since the timing clock stops when the ball is out of play, the actual time elapsed for each game is considerably more. At the elite level, basketball is fast-paced, skilled and physical. Considerable demands are placed upon anaerobic energy systems, with aerobic fitness assisting recovery between bursts of play.

Training

Most players at the elite level are active all year, undertaking personal training when the team does not hold official practice. At lower levels, players may have longer breaks between sessions, and find themselves at risk for weight gain and loss of fitness during this time. Training loads vary according to time of the season and the number of games played each week.

Physical Characteristics

Height is the most noticeable physical characteristic of basketball players. Low-medium body-fat levels are an advantage in improving agility and speed, but basketball players need to develop strength and good body positioning to withstand the contact in a game.

Common Nutrition Issues

Young basketball players tend to be tall with large energy needs for growth. A single game of basketball does not provide a great threat to the fuel capabilities of trained athletes. However, in many situations players struggle with their recovery, due to a combination of regular training and matches, and an unorganised meal plan. Games tend to be at night, which impinges on meal times.

Iron

Iron is an important nutrient for growth. Impact against other players or the floor may increase iron losses through increased red blood cell destruction. Some players may have problems with low iron status especially females with low iron intakes. Iron levels should be checked regularly when in heavy training. Iron-rich foods such as lean red meat

and breakfast cereals fortified with iron (e.g. Kellogg's Sustain) should be included regularly in the diet. Iron-rich plant foods such as wholegrain cereals; spinach and legumes should be combined with animal iron sources (e.g. wholemeal pasta and bolognaise sauce) or vitamin C sources (a glass of juice consumed with breakfast cereal) to improve iron absorption.

Summary

Conditioning and nutrition for basketball must be directed to the specific demands of the sport, i.e., sprinting ability, jumping ability, endurance running capacity, and the ability to perform complex motor skills without becoming fatigued early in the game or practice. Basketball players should undergo year-round programs of resistance training, especially to improve vertical jumping ability. In addition, cardiovascular conditioning is important, particularly during the off-season months. To the extent that these conditioning programs can strengthen joints and muscles and help the players maintain their balance and coordination without fatigue, they will contribute to the goal of minimizing injuries. Choosing the correct footwear and employing sound agility drills can also lead to reduced injuries. Nutritional Conditioning and nutrition for basketball must be directed to the specific demands of the sport, i.e., sprinting ability, jumping ability, endurance running capacity, and the ability to perform complex motor skills without becoming fatigued early in the game or practice. Basketball players should undergo year-round programs of resistance training, especially to improve vertical jumping ability. In addition, cardiovascular conditioning is important, particularly during the off-season months. To the extent that these conditioning programs can strengthen joints and muscles and help the players maintain their balance and coordination without fatigue, they will contribute to the goal of minimizing injuries. Choosing the correct footwear and employing sound agility drills can also lead to reduced injuries. From a nutritional standpoint, it is most critical that basketball players maintain adequate hydration and carbohydrate supply if they want to perform at a high level. Monitoring and correcting body weight losses during practices and games can help minimize the adverse effects of dehydration on performance and health.

Adequate rest and recovery between practices and competitions is critical to maintaining a high level of performance. A good night's sleep is especially crucial, perhaps because the body needs sufficient time to replace its fluids and carbohydrate stores.