

## **Nutrition**

A well-balanced diet is essential for healthy living. This is even more crucial for the rugby league player, to ensure that he/she has the appropriate foods to fuel training and competition, allow optimal recovery and maintain optimal health. Foods are broken down into the broader categories of carbohydrates, fats, proteins, vitamins and minerals. All of these are taken from the food we consume and each plays a specific role in the functioning of the human body.

### **Carbohydrates**

The most important fuel stored in the liver and muscles which enable the muscles to do work are broken down into: Simple carbohydrates which are prominent in commercially available sources and have little nutritional value. They are quickly absorbed and produce a rapid rise in blood glucose. Complex carbohydrates that are derived from plant or animal sources, with a high nutritional value. These also contain other nutrients, including dietary fibre. They are absorbed more slowly.

Complex: pasta, rice, grains, breads, cereals, potatoes.

Simple: fruit, sweets, biscuits, sugar, honey, fizzy drinks.

Intake: Approximately 7-10g per kg body mass per day, predominantly from 'complex' sources.

### **Fats**

An essential nutrient for energy provision and storage of vitamins and minerals, however, is detrimental to health and performance when consumed in excess. Saturated fat intake increases blood cholesterol and promotes heart disease. Unsaturated fats are essential for protecting against heart disease.

Saturated: animal fats, butter, cheese, whole milk, mayonnaise, ice cream, chocolate and lard.

Unsaturated: some margarines, nuts, sesame and sunflower oils.

Intake: Should be

### **Protein**

Broken down into amino acids, this is used for the development of muscle, enzymes and hormones. Often referred to as the 'building blocks' for growth in the body.

Sources: Meat, fish poultry, eggs, milk, yogurt, cheese and nuts.

Intake: Approximately 1-2g per kg body mass per day.

### **Fluid (water)**

Makes up 40-70% of total body mass, water is essential for most bodily functions. It transports food, oxygen and waste products; gives structure and shape to the body and helps maintain body temperature.

### **Vitamins**

Essential for human function but do not contribute to energy production. Must be obtained from food or dietary supplements.

Vitamin A: yellow and orange fruit and vegetables, eggs, dairy products.

B vitamins: wholegrain bread and cereals, brown rice, pasta.

Vitamin C: citrus, tropical and berry fruits.

Vitamin E: wholegrain bread and cereals, nuts and seeds.

### **Minerals**

Makes up approximately 4% of body mass, they maintain bone structure, nerve and muscle function. Excessive amounts can be lost through sweating.

Iron: liver, beef, turkey, chicken, fish, green leafy vegetables.

Calcium: dairy products, dark green vegetables.