The Need for Protein

Protein is an essential nutrient. The normal level recommended in the diet is 12% - 15% of total energy expenditure. The US Recommended Daily Allowance (RDA) for protein is 0.8 grammes per kilo of body weight (2). In general it is accepted that normal daily stresses do not demand an increase in protein requirement. While there was some debate in the 1980's and early 1990's as to the need for increased protein intake for sportsmen and women, most sport nutrition experts now agree that training and intense exercise increase the need for protein. The European Union's Scientific Committee on Food has also acknowledged the need for a greater than normal intake of protein for active/training athletes (EU Scientific Committee).

The additional protein requirement for the sports person is dependent on the training or exercise intensity and duration as well as the fitness level and the nutritional status of the individual. For the player in intensive training the amount of protein taken is not only important but the timing of protein ingestion is of significance. Players involved in resistance training, in team practice and in regular games will likely require a protein intake of between 1.2 to 2.0 grammes per kilo of body weight (2,7,8). While there is debate as to a precise recommendation most nutritional experts agree that the requirement is roughly double that of the RDA (2,7,26).

The additional protein requirement meets the greater demand placed on protein as an energy source during the latter stages of intense and prolonged exercise, the requirement for protein to repair cells following training and for above normal growth and development especially within the muscular system. While Protein is essential to ingest on a daily basis it does not mean that other nutrients should be limited. Protein rich diets that limit carbohydrates and fats are not encouraged as they can lead to low energy levels and blunt development and in fact may be conducive to ill health.

Nitrogen Balance

Nitrogen balance refers to the body's state of either having enough protein available for the body to use or having a lack of protein for the body's use. A positive nitrogen balance means that the body has enough protein for repair and recovery while a negative nitrogen balance means that the body is lacking this vital nutrient and thus repair and recovery will be retarded.

As stated a player in daily intense training requires between 1.2 and 2.0 grammes of protein per kilogramme of body weight in order to be in positive Nitrogen

balance (2,7,26). However, there is no evidence to show that consuming twice this amount per day is doubly better! What is important is to meet the desired amount but in a measured way. By that we mean that there are critical times when protein intake is crucial.