

Nutrition consultancy report

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The following consultancy report is based on a professional rugby player, who is required to lose body fat keep his overall body mass constant. If energy intake from the diet exceeds energy expenditure than you will gain body weight. Like wise, if your energy expenditure exceeds that of the diet than you will lose body mass. As you are looking to loose body fat but not body mass. , you must ensure that you continue to consume roughly the same quantity of energy, but in order to lose body fat, change the proportion of macronutrients (Carbohydrate (CHO), Protein and Fat) that you consume.

On an average training day you consumed roughly 3000 kcal. Around 30% of energy was consumed was fat, 35% from CHO and 35% from protein. The current energy intake is too low for a professional rugby player; you should be aiming to consume around 4000 kcal per day, in order to maintain energy stores, prepare the body for exercise and to enable the body to recover after activity. An average athlete should consume a diet of 60-75% CHO, 12-15% protein and 10-20% fat. The fat intake in your diet is clearly too high, thus should be substantially decreased (10-15%) which will enable you to lose body fat.

Fat is essential in the diet as some vitamins are only soluble in fat, therefore it cannot be cut out of the diet completely. However you should avoid 'bad fats' and aim to acquire your daily fat intake from 'good fats' such as oily fish. To compensate for the decreased intake of fat, you must consume many more calories from CHO, this will ensure that you will not lose body mass. You should base your meals around bread, cereal, rice, pasta and other CHO rich foods.

Fruit and vegetables are also important and should be heavily included as they are not only rich in CHO but also in essential vitamins and minerals, which are essential in keeping the athlete healthy. Protein is essential to repair daily wear and tear to cells and tissue, including muscle damage through exercise. Protein also allows the body to adapt to factors such as altered training programmes. It can also be used to provide energy during exercise, and therefore must be replaced through the diet to ensure normal body function.

Your current diet consists of large quantities of protein (chicken and fish), you should aim to reduce the protein slightly and concentrate on consuming larger quantities of CHO in order to prepare energy stores for exercise.

Before a match or heavy exercise, you should consume a carbohydrate rich meal of around 200 - 300 g about 3 - 4 hours before. This will ensure that your carbohydrate or energy stores are full at the start of the match.

Carbohydrate depletion is one of the main causes of fatigue during exercise, so by eating this meal fatigue can be avoided or reduced.

Avoid eating carbohydrate in the hour before exercise. During this period you should drink plenty of water to avoid dehydration throughout the match, which will impair physical and mental (i. e. decision making) performance.

Immediately before the match (ten minutes) it is beneficial to take a carbohydrate drink. This will enable you to exercise at a given intensity for a longer period of time and also to exercise at a higher intensity in the later stages of prolonged exercise. If possible you should try and consume CHO drinks throughout the match, certainly at half time, to maintain energy levels.

It is important that the CHO drink is consumed before the feeling of fatigue develops, as it can take 15-30 min for the glucose to reach the bloodstream where it can be used for energy. Although taking the above measures to ensure that the body has adequate amounts of CHO and water prior to exercise, you will be dehydrated and have decreased CHO stores at the end of exercise. You must ensure that fluid and CHO are replaced quickly during the first hour of recovery. By using further CHO you can tackle both re-hydration and increasing CHO stores at once.

Along with improved eating habits, it may be beneficial to include supplements in your diet. This will aid performance, increase endurance during training sessions and matches, and speed up recovery. Creatine supplementation can improve sprint performance, important in intermittent sports such as rugby, as it speeds up recovery time in between sprints. Protein supplements can support increases in muscle mass. Essential amino acid supplements are proven to support muscle mass when taken immediately after exercise. You should take a dose of between 6-20 g of essential amino acids immediately after exercise.