Dietary supplements are often considered less ‘risky’ than ergogenic aids in terms of health, doping outcomes and expense. Some products in this category could be considered useful in helping players meet their nutritional goals, for example, sports drinks during training and matches, sports bars and liquid meal replacements to support high energy requirements. However some dietary supplements e.g. protein powders, vitamins and minerals are often used without any evidence of need, often taken to ‘rectify’ an otherwise poor diet. Excess intake is not beneficial to performance, and could potentially be harmful to the health of young players.

IRFU Guidelines

Dietary education is the key to support good habits for health, growth and performance. Young rugby players need to focus on good, regular eating and drinking practices to support their training and competitive programmes.

Eat2Compete fact sheets give practical nutrition information to help young players eat and drink well to support their performance. Those fact sheets can be downloaded from the IRFU website www.IrishRugby.ie/eat2compete

The IRFU also has a nutrition education programme in place that all staff involved in training and coaching young players are encouraged to participate in.

The focus of the education is to equip staff with the knowledge and skills to deliver practical nutrition advice to young players.

Useful websites

IRB Anti-Doping
www.irbkeeprugbyclean.com
Irish Nutrition and Dietetic Institute
www.ind.ie
Performance Food
www.performancefood.co.uk
Australian Institute of Sport
Sports Dietitians Australia
www.sportsdietitians.com.au
Iowa State University Sports Nutrition
www.extension.iastate.edu/humansciences/sport-nutrition
Irish Sports Council
www.irishsportscouncil.ie
UK Sport
www.uksport.gov.uk
World Anti-Doping Agency
www.wada-ama.org
Irish Rugby – Eat 2 Compete
www.irishrugby.ie/eat2compete

Professional contacts

The Sports Nutrition Interest Group (SNIG) is part of the Irish Nutrition and Dietetic Institute, whose members are Dietitians (in both north and south of Ireland) with experience in sports nutrition practice. If you wish to arrange for a player or team of players to see a dietitian, please email your request to the secretary at snigindi@gmail.com

References


IRFU Recommendations

Sports Supplements and the Young Rugby Player

1. Young rugby players should focus on good eating and drinking practices to support optimum performance. Fact sheets to support this are available through the IRFU website www.irishrugby.ie/eat2compete

2. The use of protein supplements should not be recommended by schools, coaches, teachers or others involved in the training of young rugby players.

3. The IRFU strongly advises against the use of nutritional ergogenic aids (Table 2), in particular creatine, in young rugby athletes under 18 years of age.

4. Young rugby players with medical conditions (for example diabetes, asthma, coeliac disease and nutritional allergies) should receive appropriate medical and nutritional advice to assist their optimum performance.

Background information on Sports Supplements

Dietary supplements, nutritional supplements, ergogenic aids – these are some of the terms used to describe the range of products that collectively form sports supplements. Sports Supplements are manufactured by a large number of companies. The manufacturing process, labelling and marketing of these products is poorly regulated with variable quality control. Unlike medicines, sports supplements are not licensed and therefore regulation about their production is limited. This means that sports supplements may contain ingredients that are not stated on the label, or that the label does not reflect exact quantities of ingredients in the product. The control over claims as to how the product works may also be poor – for example, ‘fat burners’ may claim to cause ‘dramatic body fat reduction’ and ‘reduce fat storage’ with little or no evidence to support these claims, and no statement as to the possible adverse effects of the product.

Creatine is probably the sports supplement that has received most attention in the last 15 years. Some facts about creatine are:

- It is not illegal in Ireland and is not a banned substance (World Anti-Doping Agency (WADA))
- Performance benefits may occur in some adult athletes
- Its long term safety is unknown, particularly when started from a young age

Are there risks associated with the use of sports supplements in young rugby players?

The risks associated with the use of sports supplements in young people have not been adequately studied to provide a detailed answer to this question. This lack of research on the risk to long term safety of supplement use on young people has led to a recommendation against the use of supplements and ergogenic aids by children and adolescents (American Academy of Pediatrics, 2005), and a recommendation from the American College of Sports Medicine (ACSM , 2000) that creatine should not be used by anyone under 18 years of age. It is not illegal in Ireland and is not a banned substance (World Anti-Doping Agency (WADA))

There have been a number of high profile cases where an athlete has claimed that the use of a sports supplement was the reason for a positive doping test. One substance that is worth mentioning is Methylhexaneamine (MHA). MHA is a stimulant and it was added to the WADA prohibited list in 2010. The presence of this substance in a drugs test will result in a positive test. Players should learn more about this in the resource section of the IRFU’s Keep Rugby Clean website www.irishrugby.ie/keeprugbyclean.com

What are the important elements that maximise performance in young rugby players?

It is absolutely clear that successful individual performance in rugby, as in other sports, is related to a number of variables that include:

- talent
- coaching and skill acquisition
- structured training and conditioning
- motivation and dedication
- optimal nutrition
- adequate sleep and recovery

None of these can be replaced by the use of sports supplements. Often the desire to get physically bigger is the reason young players choose to take supplements, which may seem the quick-fix answer for accelerated growth. There is little evidence to conclude such practice, as young players will gain size and strength from well planned training and recovery, supported by adequate eating and drinking.

Sports Supplement Classification

Sports supplements can be broadly divided into two main categories:

Dietary Supplements

Nutritional Ergogenic aids

These categories are explained in the tables below.

Table 1 Dietary Supplements

Function | Examples
--- | ---
Provide nutrients found in everyday foods in a form that may be convenient or practical | Sports bars, Sports drinks
May be designed to prevent or treat a nutritional deficiency (medical supervision) | Multi-vitamins/minerals
Specific nutrients e.g. Iron, Calcium
May allow players to meet a specific need in training or competition, if not met by diet | Liquid meal replacements
Protein powders
Recovery formulae

None of these is explained by the use of sports supplements.