













# **Rugby Nutrition:**

# **Supplements – Introduction**

## What are Sport Supplements?

Sport Supplements are defined by SAIDS (South African Institute for Drug-Free Sport) as sources of nutrients and/or other substances, marketed and sold as such in the field of amateur and/or professional sport, with a nutritional or physiological effect whose purpose it is to supplement the normal diet, directly or indirectly alter/enhance body composition, enhance sporting performance and/or assist with recovery following sporting activities. <sup>[1]</sup>

There are just a handful of supplements, containing substances which are NOT prohibited or banned, that may offer either a practical, clinical or performance advantage to rugby players. It's important to know what these are and whether or not they are needed at all, and if you require them, how you should best integrate them into your diet. There are so many risks associated with haphazardly using supplements. [2,3]

The aggressive marketing strategies utilised by industry have created a false belief in the value of supplements, many times misleading you to believe that sport supplements will dramatically enhance your performance, either making you bigger, faster, stronger and/or fitter.





However, research evidence has shown that whether the supplements are used individually, as a cocktail or stacked, the performance effect (including belief or placebo effect) <sup>[4]</sup> is only about 1-3%!! This is far less than other proven interventions like a basic diet, training, rest and recovery, and is with much lower risk of contamination, if any.

Before using supplements, you always need to weigh up the benefits vs. both the risks and the costs, by asking the following questions: [3]

- 1. Is there a food or fluid based solution that can be used to manipulate your diet?
  - Supplements do not correct for a **poor diet...**

### 2. Does it work?

 Has the supplement been proven to be effective in offering a performance benefit in your specific situation?

### 3. Is it legal?

- If it is, is there a risk of the supplement being contaminated with a **prohibited and banned** substance?
- Has the specific batch been tested by an accredited laboratory for all current prohibited and banned substances according to the appropriate WADA ISO standards?

## 4. Is it **safe**?

• Are there any side effects that may adversely affect your health?

As rugby players you need to be aware that YOU are completely liable and responsible for any and all substances appearing in your urine and blood, and if you test positive for any prohibited and banned substances your career may be ruined.

Even supplements which are thought to be safe, and regardless of having been tested by an accredited laboratory against the WADA ISO standards or not, may still carry the risk of being contaminated with prohibited and banned substances, since there is no proper regulation of the supplement industry worldwide. [5]





## **Further considerations:** [1,2,3,5,6,7]

- You need to understand that although industry claims that their products are safe, it does not mean that they work, or that their products are healthy! There are lots of different logos being used to market safety, efficacy, GMP (Good Manufacturing Practices) and so on. Safety can also mean a whole lot of different things and there can never be an absolute guarantee that a supplement will be free of a WADA prohibited and banned substance.
- Supplements can also **shift your focus** away from more important proven performance enhancing factors like training and optimal nutrition, rest and recovery.
- Supplements can do more harm than good if used haphazardly more is not necessarily better!
- Responses to supplements vary between players so requirements and usage needs to be individualized and monitored.
- Players also need to consider other concerns such as:
  - supplements act as a gateway to increased supplement usage, and stacking, which may result in unsafe dosages and even steroid use
  - supplement-to-supplement, supplement-to-medication and supplement-to-food interactions
  - o supplements may in fact decrease adaptations to training
  - o the financial cost vs. reward
- Sports-specific supplements are not recommended for persons younger than 18 years.

To follow a safe, effective and low-risk approach to the use of supplements, rugby players need to take responsibility and follow the principles of **best practice**:

Consult a dietitian, with sports nutrition experience who can advise on how to **integrate supplements into an individualized and periodised food plan, with optimal** amounts of nutrients required, based on your training and adaptation requirements, dietary and medical history, social circumstances and food preferences etc.





For more information on *Rugby Nutrition*, go to the BokSmart website <a href="www.BokSmart.com">www.BokSmart.com</a> or go to the following link: <a href="http://boksmart.sarugby.co.za/content/eating-and-drinking-right">http://boksmart.sarugby.co.za/content/eating-and-drinking-right</a>

### **REFERENCES**

- A Claassen. Position Statement of the South African Institute for Drug Free Sport (SAIDS) on the use of supplements in sport http://www.sasma.org.za/articles/SAIDS%20Position%20Statement%20for%20ADULTS.pdf
- 2. Phillips SM, Breen L, Watford M, Burke LM, Stear SJ, Castell M. 2012. A to Z of nutritional supplements: dietary supplements, sports nutrition foods and ergogenic aids for health and performance. *Br J Sports Med.*; 46:454-456.
- 3. Meltzer, S. & Associates, 2013, SSISA Nutrition short course, Module 7.
- 4. Clark, V. R., Hopkins, W. G., Hawley, J. A., & Burke, L. M. (2000). "Placebo effect of carbohydrate feedings during a 40-km cycling time trial." *Medicine and Science in Sports and Exercise*, *32*, 1642-1647.
- 5. World Anti-Doping Agency (WADA), www.wada-ama.org
- 6. Geyer H, Parr MK, Koehler K, Mareck U, Schanzer W, Thevis M. 2008. "Nutritional supplements cross-contaminated and faked with doping substances." *J Mass Spectrom*. 43:892-902
- Claassen A. 2011. "Position Statement of the South African Institute of Drug Free Sport (SAIDS) on the use of supplements in sport in school-going YOUTH". <a href="http://www.sasma.org.za/articles/SAIDS%20Position%20Statement%20for%20YOUTH.">http://www.sasma.org.za/articles/SAIDS%20Position%20Statement%20for%20YOUTH.</a>

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