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## Rugby Nutrition:

### Fuelling:

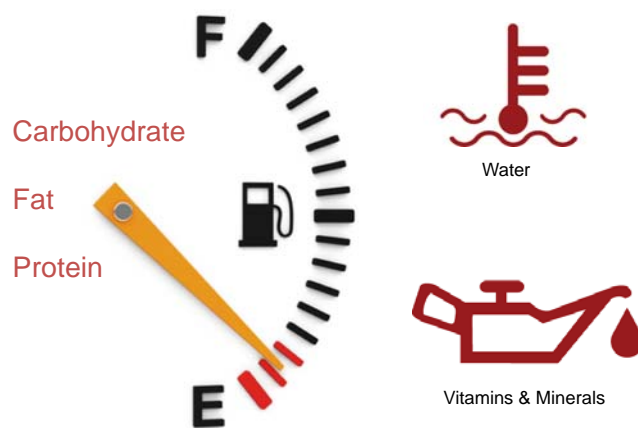
#### Food *versus* Fluid *versus* Supplements – an integrated approach

Your **nutritional priorities** as a rugby player are to meet your energy, nutrient and fluid needs.

Carbohydrates, proteins and fats are the three primary energy-containing nutrients.

Vitamins and minerals, though not directly providing energy, are involved with energy releasing processes and have other important functions related to health, well-being and performance.

Fluid is important for hydration and preventing heat stress.



**Figure 1.** Macronutrients (carbohydrates, proteins and fats), micronutrients (vitamins and minerals) and water are essential for optimal health and performance.



**Food** offers a natural package of energy and nutrients.

Within the category of food there are also many different formats and combinations of ingredients that can be easily combined or manipulated to help you achieve a specific goal.

Think of an apple compared to a dried apple. If you're lacking appetite, it is much easier to eat a small volume of concentrated energy, in the form of dried apples (25g or 5 rings = 253 kJ (60.5 kcal) compared to 1 medium whole apple (110g = 253 kJ (60.5 kcal)).

Similarly, if you are trying to reduce your energy intake, having a slice of high fibre wholegrain bread has the same amount of calories as 3 crackers do, but the bread will be more filling or satisfying.

**Fluid** also comes in many different formats and formulations, besides water.

Again, it is important to know what your goals are and to know the different products available, so that you are able to make clear, informed and practical choices. Fluid for example can be a vehicle for energy and nutrients (e.g. protein and vitamins) and is also important for maintaining hydration.

If your hydration needs outweigh your need for fuel, a lower kilojoule option or water may be more appropriate. On the other hand, if you need to replenish nutrients or gain weight, there is a range of milk-based or sports-drinks to consider.

And then there are **supplements...**

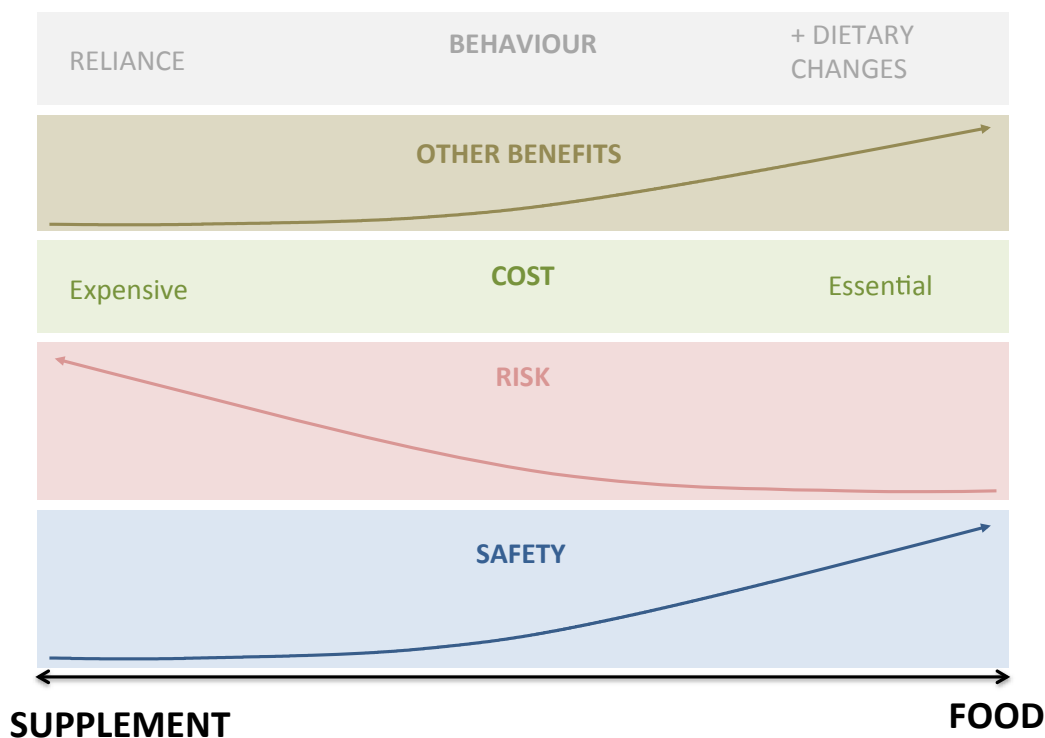
This category includes a broad and growing range of products, which may be referred to as “dietary supplements”, “nutritional supplements”, “ergogenic aids”, “health supplements” or “sport supplements”.

Although these products are heavily marketed and promoted to meet the health and performance requirements of rugby players, the reality is that **only a mere handful may actually have any sort of practical, performance or health role.**

Moreover, supplements are largely unregulated as there is a lack of legislation and governance in the supplement industry worldwide.

As a result, many products are advertised and sold with misleading claims with no scientific proof that they actually work, incorrect labelling, and many products may even be unsafe to use. <sup>[1, 2]</sup>

Knowing which supplements may work, and at what cost (*to your budget, in terms of your personal health and safety, risk of contamination and the like*), and how to integrate them, if at all, into your diet, must be done only in consultation with a registered sports physician or registered dietician with sports nutrition experience and preferably only once a food-based approach has been considered first.



**Figure 2. Comparison of food versus supplements:** Eating food is not only a necessity for life, it is also one of life’s true pleasures. There’s a whole lot more to food than merely supplying fuel. <sup>[2]</sup>

In essence, performance nutrition is about knowing the optimal mix of fuels that will work for you.

Specifically, it is about knowing:

- **How much and what you need:** carbohydrate, protein, fat and micronutrients
- **When:** timing - when you need to eat or drink what
- **The format:** food versus fluid choices
- **Supplements:** If needed, and only then, what and how to integrate the supplement(s) into your diet, considering how safe or ‘low risk’ the product is.

The related *Rugby Nutrition* sections that are on the BokSmart website ([www.BokSmart.com](http://www.BokSmart.com)) will systematically work through meeting your specific energy, nutrient, fluid, and supplement requirements so that ultimately you can make better informed decisions when it comes to customizing your own diet and these will help guide you on how to put these ideas into practice.

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

## REFERENCES

1. 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. Meltzer, S. & Associates, 2013, SSISA Nutrition short course, Module 7.
3. Meltzer S and Fuller C. SARU Supplement Guidelines. Boksmart;  
<http://images.supersport.com/BokSmart%202011%20-%20SARU%20Supplement%20Guidelines.pdf>

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