



www.BokSmart.com



Rugby Nutrition:

Introduction to Rugby Nutrition: What's new?

As a rugby player aiming for **marginal** or even **bigger gains**, you need to be aware of **real factors** that enhance performance without being distracted by nonsense ideas or ideas that have no scientific or practical basis.

With nutrition this is a challenge as new ideas and products are constantly emerging in both the media and marketplace.

A quick Google search on the Internet for "*rugby nutrition*" yields **13 700 000** 'hits' and for "*supplements for rugby*" **1 930 000** 'hits'. Much of this information, especially in the case of supplements, is not based on any real scientific evidence.

More **reliable, credible and evidence-based** information can be found in good scientific journals and recently there certainly have been an increased number of articles written on rugby nutrition. But even then you have to ensure that this is **relevant for you**.

You have to consider the details of the study and look at who the subjects were.



Some simple questions to ask:

- Were they trained or untrained rugby players?
 - *Untrained rugby players frequently show improvements, which many times are unrelated, or cannot really be attributed to what they ingested*
- Was it a field-based or laboratory based study?
 - *Field-based improvements or benefits within real life circumstances are far more valuable than laboratory studies*
- Was the performance test appropriate?
 - *Do improvements in the performance test used in the study translate into any significant and improved performance benefits 'on the field'?*
- How were their diets controlled?
 - *Did everyone receive the same energy intake or was it related to their body weights and did it take into account their habitual dietary intake?*

These are just some of the considerations that one needs to mull over before making an informed decision as to the study's scientific and practical value.

Some of the **new ideas and findings** that have been written about in **scientific** journals touch on the following:^[1,2,3,4,5]

1. Nutritional practices and body composition differences in rugby players
 - *Dietary manipulations have been shown to enhance adaptations to training and achieve body composition goals, but it seems that rugby players don't always take advantage of these dietary benefits.*
2. Hydration
 - *Besides the to-be-expected literature on hydration, precooling techniques using "slushies" (ice slurry sports drinks) pre-and during-exercise may combat the debilitating effects of heat-stress induced fatigue.*
3. Dietary Periodisation
 - *Synchronizing nutrition with a periodised training program may derive further benefits.*

4. Hygiene, travel and immunity

- *The incidence and severity of infections is a problem for many players, and travel and hygiene (standards can differ when travelling) adds to the risk. Several nutrition strategies have been shown to improve immunity including the use of probiotics.*

5. Oral health

- *It may not be that obvious but maintaining good oral health can improve your health, well-being, training and performance.*

6. Female athletes

- *It has been recognized that female athletes require different dietary strategies.*

7. Ramadan

- *The impact of Ramadan on performance will largely depend on strategies that are put into place to combat dietary challenges during this time.*

8. Nutrition, skills and cognition ('thinking ability')

- *Besides the provision of energy for performance, research is now focusing on the impact of nutrition and specific nutrients on skills and cognition. Think of the more obvious and better known nutrients associated with this topic - carbohydrate, caffeine and hydration, but many other nutrients are currently being explored for their potential roles.*

9. Nutritional needs for growth and development

- *Recent training and nutrition models don't only focus on chronological age but take into account individual differences in growth and maturation.*

10. Train low, compete high

- *Periodic training with reduced muscle glycogen availability may be a strategy to employ to potentially enhance training adaptations. Certainly a topic of great interest and may warrant some experimentation.*

11. Timing of dietary intake

- *Timing of nutrient intake is very important and can influence muscle adaptations and reconditioning. Even what you eat before you sleep, counts.*

12. The benefits and risks of supplements

- *Can supplements ever compensate for poor food choices; can they result in aggregated gains, and what about the placebo effect? These are some of the questions addressed in many reviews.*

TAKE HOME MESSAGE:

The additional *Rugby Nutrition* sections that will follow on the BokSmart website (www.BokSmart.com) will extract what is relevant from the literature on these topics and guide you on how to put these ideas into practice. For more info on *Rugby Nutrition* go to: <http://boksmart.sarugby.co.za/content/eating-and-drinking-right>

REFERENCES

1. Potgieter S, Visser J, Croukamp I, et al. Body composition and habitual and match-day dietary intake of the FNB Maties Varsity Cup rugby players *S Afr J SM* 2014;26 (2):35-43.
2. Res OT, Groen B, Pennings B, et al. Protein ingestion prior to sleep improves post-exercise overnight recovery. *Med Sci Sports Exerc*; 2012; 44 (8): 1560-9.
3. Bishop D. Dietary supplements and team-sport performance. *Sports Med*. 2012; 40:995-1017,20
4. Mujika I, Burke LM. Nutrition in team Sports. *Ann Nutr Metab*.57 Suppl 2: 2010: 26-35
5. Louise M. Burke & Christine King Ramadan fasting and the goals of sports nutrition around exercise, *Journal of Sports Sciences* 2012; 30:sup1: S21-S31.

Document Compiled by Shelly Meltzer RD(SA), Shelly Meltzer & Associates