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## Rugby Nutrition:

### Oral Health

Incorporating a few good strategies can improve your oral health. It might not be as obvious but maintaining good oral health can improve your general health, well-being, training and performance. The effect of poor oral health has both short-term and long term consequences.<sup>[1]</sup>

- ✓ **Short-term consequences:** Pain and distress, increased general inflammation from infections, difficulties in eating and sleeping, reduced quality of life → 🗑️ impact on training & performance.
- ✓ **Long-term consequence:** Increased risk of tooth loss, increased treatment need (and cost!) → functional and emotional damages.

Examples of oral health problems include dental caries (tooth decay), dental erosion, gum infections (gingivitis) and loss of teeth due to trauma.<sup>[1]</sup>

**Medical, coaching and organizational staff should play a positive role in encouraging athletes to improve oral health behaviors and beliefs.<sup>[1]</sup>**

Tooth decay is the result of repeated attacks by bacteria on dental plaque. **Sugars** can contribute to tooth decay by providing energy for bacterial growth in the mouth. The acids formed by the bacteria and the **acidic nature of high sugar drinks and food** gradually erode the tooth enamel, causing decay.

#### Factors that are associated with tooth decay:

- The stickiness of the carbohydrate food and the exposure to specific foods such as citrus fruit and juices, vinegar, acidic medications and supplements;
- The concentration of sugars in the food, i.e. how much;
- The duration that the teeth are exposed to the acidic environment, i.e. how long;
- The frequency of exposure, i.e. how often.



Therefore the amount of sugar eaten is not as important as the type of sugary food eaten, how often it is eaten and how long it sticks to the teeth.<sup>[3]</sup>

## TIPS TO PROMOTE ORAL HEALTH

1. Ensure regular assessment (once a year, especially during the pre-season), to plan for prevention and early treatment of disease.<sup>[1]</sup>
2. Practice good oral hygiene.
  - Brush teeth twice a day and floss every day.
  - Have your teeth cleaned professionally every 6 months.<sup>[2]</sup> This is very important if you wear braces.<sup>[3]</sup>
3. Don't smoke.<sup>[1]</sup>
4. Use custom-made mouth guards as opposed to over-the-counter "boil and bite" mouth guards.<sup>[1,2]</sup>
  - Always clean mouth guard after use with a toothbrush and dishwashing liquid, rinse and store in container.
  - Antimicrobial solutions and toothpaste can damage mouth guards.<sup>[2]</sup>
  - Do not rinse your mouth with a sports drink before inserting your mouth guard.<sup>[4]</sup>
5. Drink small amounts of water regularly during and after exercise to avoid a "dry mouth".
  - Saliva protects your mouth and teeth and local drying of the mouth during exercise can aggravate the impact of sugar and acid on caries (tooth decay) and erosion. <sup>[1]</sup>
6. Consume casein-containing food like milk and cheese.<sup>[3]</sup>
7. Chew sugar-free gum after meals.<sup>[3]</sup>
8. Limit sticky sweets and reduce the frequency and duration of exposure to sweetened beverage consumption (e.g. sports drinks) to only when needed (during high intensity and/or prolonged training only).<sup>[1]</sup>
  - Swallow sports drink immediately –i.e. do not hold or swish in your mouth.
  - Drink chilled drinks and through a straw or squeeze-bottle to reduce erosive effects and minimize contact time with teeth.
  - When preparing sports drinks from powders or concentrates, make them up correctly.
  - Using less water than specified will increase the concentration of the sugar, thereby increasing the risk of tooth decay and may also cause gastrointestinal distress.<sup>[4]</sup>
  - When using carbohydrate gels always consume with water to dilute the concentration of sugar.<sup>[4]</sup>
  - Benefits from using modified sports drinks (i.e. adding calcium or phosphate) have been reported to lessen the erosive effect of sports drinks.<sup>[1,4]</sup>
9. Delay brushing teeth for at least 30 minutes after consuming a sports drink or post-exercise recovery to enable the tooth surface to re-harden.<sup>[4]</sup>

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

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[www.sportsdietitians.com.au](http://www.sportsdietitians.com.au)

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