



INTERNATIONAL  
OLYMPIC  
COMMITTEE

# IOC Medical Commission

**DENTAL**





Elite athletes devote thousands of hours to the quest for excellence in their sport – the goal being to perform and compete at the highest level possible.

All aspects of health and safety – including dental health – need to be considered by the athlete. The mouth and the body must work together as a unit, and a healthy mouth will allow the body to function in the most efficient manner possible. From better chewing and digestion of food all the way to proper support of the upper body muscles, a healthy dental condition will bring out the best in an athlete.

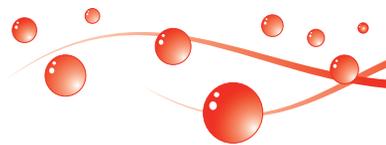
Equally as important to the competitive athlete is the negative effect on performance that can come from a dental emergency. An infected tooth, gum abscess or swollen wisdom tooth that happens on the night before a championship or important competition can have disastrous results.

The mouth is a “window” to the rest of the body, and recent studies have shown a direct connection between poor oral health and such conditions as diabetes, pneumonia, heart ailments and both premature and low birth-weight babies. So it is quite clear that a healthy body needs a healthy mouth as a starting point.

The goal of this brochure is show you how dental health is related to athletic performance, and to provide you with the proper tools to improve your dental health and prevent dental injuries.

We will help you understand how to achieve and maintain proper oral health. This will not only help to prevent dental emergencies, but will also keep both the mouth and the body working in harmony in order to achieve the best possible results on the field of play.

**Take care of your teeth,  
and they will take care of you!**



# The IOC Medical Commission Protecting Athletes Teeth!

The IOC, through the Medical Commission, makes the best efforts possible to preserve the health and safety of the athletes during both training and competition. However, studies at a number of previous Olympic Games have shown that, while the athletes exhibit the highest levels of training and conditioning, their dental health was often found to be at or below the average level for the general population.

There are many possible reasons for this. Often, the financial costs of obtaining proper dental care are difficult to manage within the limited budget of an athlete. Athletes who travel extensively may find it difficult to schedule regular dental checkups and cleanings. Necessary treatment – such as fillings or removal of wisdom teeth – might be delayed for fear of interfering with training schedules or competition. And, many athletes may not have been educated on the importance of good dental health to their overall performance on the field of play.





*Dental Treatment at the Olympic Polyclinic - Torino 2006*

## Olympic Dental Care

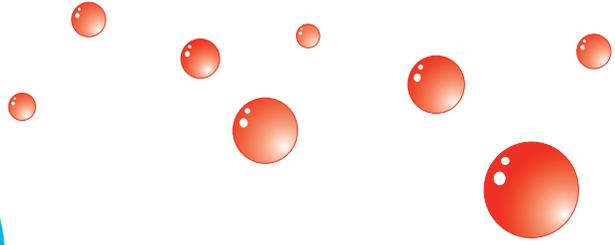
Since the 1920's, the IOC has supported a dental clinic for athletes and Olympic Family members at every Olympic Games. At some Games, over 1000 athletes and other individuals benefited from this programme. The Olympic Dental Service has provided both emergency and required dental care, as well as a mouthguard programme for athletes participating in contact sports. As a testament to the importance of the Sports Dentistry programme at the Olympic Games, a Dentist has been a member of the Medical Commission Games Group since 1999.

# How Can I Care for My Teeth?

## Visit Your Dentist

- Go for regular (every 6 to 9 months) dental checkups and cleanings. Treat cavities and other problems when they are small and first identified. Fix any old fractured or leaking fillings when recommended.
- Get X-rays (when necessary) to diagnose cavities, impacted wisdom teeth and other problems not easily seen.
- Replace missing teeth to improve both chewing and appearance.
- In young athletes, identify and treat wisdom teeth problems when found. Studies have shown that athletes with impacted wisdom teeth may be up to four times more likely to suffer a broken jaw while competing.





## Brush Your Teeth

- Brush your teeth twice a day (for at least 2 minutes) using a toothpaste containing fluoride. Make sure that you brush and floss just before bed – oral bacteria love to use any sugars or other food left on the teeth overnight to create the harmful acids that cause cavities.
- Use a soft toothbrush to prevent damaging your gums or wearing away your teeth. Remember that the best brushing techniques are to either use small circles OR to brush your teeth away from the gums (brush from the gums and down the tooth). Aggressive brushing across the teeth can damage both the teeth and gums.
- Replace your manual toothbrush – or the head of your electric toothbrush – every two or three months.



## Eat Right

- Practice proper nutrition and avoid foods and beverages that can promote cavities or gum disease.
- Be careful when using sport beverages – the sugars and acids in these drinks can promote both cavities and erosion of the teeth. If you do use these drinks, try diluting them with water or drinking bottled water afterwards. Also, chilled sport beverages are less harmful to the teeth than room temperature ones.
- Opt for dentally healthy snacks between meals. Fruit and vegetables, crackers, cheese and other smart foods are much less likely to cause cavities than cookies, ice cream, or sugary sport bars. Save the treats for after meals when you might be able to brush.

## Dentally Healthy Snacks

- Plain milk
- Unsweetened fruit juices
- Fruit and raw vegetables
- Plain yogurt and cheese
- Hard-boiled eggs
- Nuts and seeds (sunflower, pumpkin, etc.)
- Melba toast or crackers
- Salads





## Stay Hydrated

- Try to avoid being dehydrated at any time. Teeth need minerals from saliva in order to repair microscopic cavities that regularly develop. A dehydrated athlete does not produce enough saliva to allow this repair process to occur, and larger cavities or erosion areas can develop.

## Avoid Bad Practices

- Avoid bad practices such as chewing ice cubes and using smokeless tobacco. Smokeless tobacco has been shown to be a risk factor for oral cancer. Switch to either sugarless gum or to one of the “tobacco-free” chews that are currently available.



*Heavy tooth wear in an athlete*

## Signs of Oral Cancer

- Bleeding that you can't explain
- Open sores that don't heal within 7 to 10 days
- White or red patches
- Numbness or tingling
- Small lumps and thickening especially on the sides or bottom of your tongue; the floor or roof of your mouth; or the inside of your cheeks.



*Signs of Oral Cancer*

## Wear Proper Protection

- For athletes in contact sports, wear a properly fitting, custom-made mouthguard (fitted by a Dentist). Avoid store-bought or “boil-and-bite” guards that not only fit poorly but also offer significantly less protection.
- A new technique, called pressure lamination, creates an excellent mouthguard that does not cause problems with breathing, speech or nausea – all of which have been common complaints by athletes.
- In addition to protecting the teeth, there is some evidence that mouthguards may play a role in decreasing both the incidence and severity of brain concussions. By absorbing some of the impact of an upward blow to the jaw, along with holding the jaw in a more favorable position, a mouthguard may reduce the harmful forces that cause concussions.



## Be Cautious with Jewellery

- When considering oral piercings or other forms of mouth jewellery, remember that in contact sports there is always the risk that these could be ripped out or aspirated (knocked into the airway). There is also the possibility of infection during placement or if they are not cleaned, and they can also cause damage to the teeth and gums.



## In Case of an Accident?

If a tooth gets knocked out, gently rinse it off and put it right back in to the socket. The tooth will have the best chance of successfully reattaching if you put it back within 5 minutes of coming out. If you can't replace the tooth in the mouth, try putting it in a cup of cold milk and get to a Dentist or hospital as soon as possible (ideally within 30 minutes).

Similarly, if you fracture a piece or corner of a tooth you should also save it, as in many cases these can be reattached and look almost as good as new.



## What To Do if a Tooth is Knocked Out

1. Find the tooth
2. Gently rinse it in cold water and replace it back in to the socket within 5 minutes
3. If it cannot be replaced, store it in cold milk
4. Get to a Dentist immediately
5. Find and keep any small fractured pieces for possible reattachment

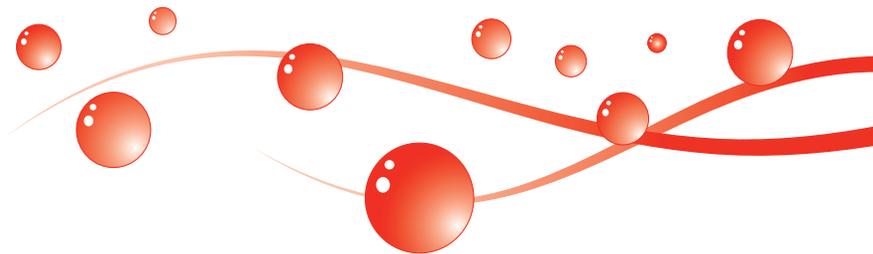


*Dental trauma in an unprotected athlete*

## Five Keys to Proper Oral Health

1. Regular checkups and cleanings
2. Floss properly and brush with a toothpaste containing fluoride
3. Use a soft toothbrush and change it often
4. Eat smart and healthy snacks
5. Avoid smoking and smokeless tobacco





## **Where Can I Get More Help?**

Improving your dental health and performance can start today. Get yourself into a regular program of brushing and flossing, and take a serious look at your diet to eliminate those cavity-causing foods. Get a checkup and cleaning if it has been more than six months since your last one, and talk to your Dentist about a custom-made mouthguard if you are in a contact sport. Always remember it is much less expensive AND time-consuming to deal with dental problems when they are small.

The IOC continues to work with both National Olympic Committees and International Federations to encourage them to recognise the importance of dental issues and to assist athletes – where possible – in obtaining treatment or funding. The IOC will also continue to work with the organisers of the Olympic Games to provide screenings, mouthguards and “urgent and necessary treatment” during the Games.

**Take care of your teeth,  
and they will take care of you!**

**For further information, talk to your Dentist,  
visit [www.sportsdentistry.com](http://www.sportsdentistry.com),  
or contact the IOC Medical Commission.**



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