



FDI POLICY STATEMENT

Sports Mouthguards

Adopted by the FDI General Assembly: 26th September 2008, Stockholm, Sweden

Background

Participants of all ages, genders and skill levels are at risk of sustaining oral injuries in sports at both recreational and competitive levels.¹⁻³ Traumatic oral injuries also occur in non-contact activities and exercises.^{1,3} Studies have consistently shown that custom-made mouthguards with adequate labial and occlusal thickness offer significant protection against intraoral injuries by providing a resilient, protective surface to distribute and dissipate impact forces. There is, however, insufficient evidence to confirm that mouthguards prevent concussion injuries.

In a meta-analysis,² the overall injury risk during athletic activity was found to be 1.6-1.9 times greater for mouthguard non-wearers compared to mouthguard wearers. A study⁴ of collegiate basketball teams found that athletes who wore custom-made mouthguards sustained significantly fewer oral than those who did not.

Evidence suggests¹ that custom-made mouthguards provide the best level of protection and wearer comfort, that mouth-formed ('boil-and-bite') mouthguards are less adequate, and that stock mouthguards provide the lowest level of protection and wearer comfort.

Statement

The FDI World Dental Federation recommends:

- that national dental associations promote to the public and to oral health care professionals the benefits of sports mouthguards, including the prevention of orofacial injuries
- that appropriate oral health care professionals determine if their patients participate in any sports, or any activities which carry a risk of oral injury
- that people of all ages use a mouthguard while participating in any such sports or activities
- that patients are educated about the benefits of mouthguards in preventing orofacial injuries, including appropriate guidance on mouthguard types, their protective properties, costs and maintenance requirements.

References

- 1 American Dental Association Council on Access, Prevention and Interprofessional Relations; American Dental Association Council on Scientific Affairs. Using mouthguards to reduce the incidence and severity of sports-related oral injuries. *J Amer Dent Assoc* 2006 137: 1712-1720

- 2 Knapik JJ, Marshall SW, Lee RB, Darakjy SS, Jones SB, Mitchener TA, de la Cruz GG, Jones BH. Mouthguards in sport activities: history, physical properties and injury prevention effectiveness. *Sports Med* 2007 37: 117-144
- 3 Kumamoto DP, Maeda Y. A literature review of sports-related orofacial trauma. *Gen Dent* 2004 52: 270-280
- 4 Labella CR, Smith BW, Sigurdsson A. Effect of mouthguards on dental injuries and concussions in college basketball. *Med Sci Sports Exerc* 2002 34: 41-44