

Sports Mouthguards

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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 noncontact 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

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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

