



What You Need to Know About Athletic Mouthguards

An ideal mouthguard should:

- protect the teeth, soft tissue, bone structure, and mandibular joints
- diminish the incidence of concussions
- exhibit protective properties including high power absorption and distribution
- provide a high degree of comfort and fit including a balanced and even bite.
- have sufficient thickness in critical areas
- remain securely and safely in place during action and when hit
- cause minimal interference to speaking and breathing
- be durable, resilient, tear resistant, odorless and tasteless

Only custom fitted, pressure laminated mouthguards meet these requirements.

Pressure laminated mouthguards are made directly on stone casts made from an impression of the athletes mouth. Multiple layers of EVA (ethylene vinyl acetate) are laminated together under high heat and pressure to achieve the necessary thickness in critical areas to absorb and distribute impact forces. These custom mouthguards are prescribed by some dentists and are the most state of the art type of oral/facial protection for full contact competitive sports. They are the most accurate, protective and stable mouthguards available.

Interesting facts:

- Custom pressure laminated mouthguards are the only type of mouthguard accepted for use by the International Olympic Committee for use in Olympic competitions.
- Custom pressure laminated mouthguards are mandatory equipment for most athletes in other countries. (World Cup Soccer, etc.)
- Historically, the USA has lagged behind much of the rest of the world in educating their sports active athletes about the preventative benefits of wearing properly designed and fitted mouthguards.
- Stock (over the counter) and boil and bite type mouthguards provide only slightly better protection than wearing no mouthguard at all. Since 1980 there have been no studies showing that these stock (over the counter) or boil and bite type mouthguards offer significant protection. Unfortunately, even with this lack of evidence, twenty six years later, 90% of mouthguards worn in the USA are still sold over the counter in sporting good stores at a cost of between \$3-25 dollars. Because of these boil and bite types of mouthguards, most athletes perceive them to be a nuisance as they are uncomfortable to wear, make talking and breathing difficult, and they tend to have poor retention making them not stay in place well.
- Dental injuries are the most common type of oral/facial injury sustained during participation in sports.
- 80% of dental injuries occur to the front 4 incisors
- Once you have a concussion, you are four times more likely to sustain a second concussion
- At risk sports where oral/facial injuries are likely to occur include football, soccer, basketball, rugby, hockey, racquetball, boxing, water polo, lacrosse, baseball, and cycling. Note: a 1995 study found that in football where mouthguards, helmets, and face masks are required to be worn, the

incidence of oral/facial injury was only .07%. In basketball, where no oral/facial protection is commonly worn, the injury rate was 34%.

As dentists, Carol and I have a special interest in protecting and preventing oral/facial trauma. We are acutely aware of the risks and costs of restoring a smile after a traumatic injury. Victims of severely fractured teeth or total teeth avulsions (knocked out teeth) who do not have the teeth preserved and immediately reimplanted, will likely face lifetime dental costs of \$10,000.00-15,000.00 per tooth. Our four daughters, all of whom have been actively involved in competitive sports, all wear custom mouthguards which we are able to fabricate in our office with the specialized equipment needed.

In interest of seeing that all our patient athletes are safely protected, our qualified staff will fabricate these custom pressure laminated mouthguards for our patients of record **at no cost to the athletes** (a cost savings of usually \$260.00 per mouthguard depending on the design or lab fabricating them). For our patient athletes who are interested in having these mouthguards made, it will require 2 appointments to be scheduled at our office. The first appointment (approximately 20 minutes) an impression of your teeth will be made. At the second appointment, to be scheduled 4-5 days later, we will deliver your new mouthguard and adjust it to insure proper fit and occlusion (approximately 10 minutes).

If you have any questions please, call us at (330)-673-9745. The doctors and staff of Martin Dental Care look forward to helping you protect your smile.