

## Performance Mouthwear

Amazingly enough, one's bite can have an effect on a multitude of body functions and overall health. In other words, as we have discussed before, the way your teeth and jaw joints meet together can affect a lot of different health problems. In the past, we have touched on the negative effects of a bad bite, such as jaw pain, migraine headaches, jaw locking, and neck/shoulder problems. On the positive side, there is also research that shows that a healthy bite and jaw position can actually improve your health. To go a step further, you can actually improve athletic performance by holding your teeth and jaw joints in a relaxed position. The new buzzword for this technology is performance mouthwear.

Research has shown that a properly positioned jaw can increase strength, concentration, endurance, and recovery time. Dentists can now make a custom fit mouth guard to put the jaw into this zone to improve athletic performance. If this all sounds like snake-oil, please read on. The science is there.

There are three main ways in which we believe a proper jaw position can improve athletic performance. First, if the lower jaw is positioned down and forward, the airway from the mouth to the lungs is forced into a more open position. This makes breathing easier and allows more airflow and oxygen to and from the lungs. The second way that mouthwear improves performance is by eliminating the clenching of teeth during exertion. Gritting your teeth helps to activate a cascade of stress hormones, including cortisol, that negatively affect concentration and endurance. By keeping athletes from clenching, performance mouth guards reduce the release of these stress hormones. Studies have shown that athletes can lift more weight and jump higher with their jaw in the proper athletic position. Finally, performance mouth guards position the jaw joint so that crucial nerves and blood vessels behind the condyles (where the bottom jaw attaches to your skull or the hinge) are not impinged upon. This condylar position (where there is space behind where your lower jaw and skull meet) has also been shown to reduce the incidence of concussions.

So what does it take to have a performance mouth guard fabricated? On the first dental visit, custom impressions and an accurate bite must be taken of the athlete's teeth. This information is then sent to a special lab where the mouth guard is custom made and returned to the dentist. A second office visit is required to deliver the appliance. Performance mouthwear has been shown to help athletes in almost all sports and there are different versions of the guards for contact and non-contact activities. For more information and some pretty pictures of the different types of performance mouthwear available, go to [www.underarmour.com](http://www.underarmour.com).

Until next time, keep smiling.

-Please share comments with Drs. Parrish at [www.ParrishDental.com](http://www.ParrishDental.com).