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Effect of the use of the mouthguard on anaerobic performance: a systematic review

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The prevention of trauma is important not only because of the expressive and growing prevalence of this injury, but also because of the high impact on quality of life in terms of physical, psychological and social discomfort, negatively interfering in the athlete's life and career. The use of mouthguards (PB) is an important intraoral device used by athletes, especially those with high performance, with the objective of preventing dental and facial trauma during sports practice. In addition, some studies point to the advantage of using (BP) related to occlusal stability and muscle synergism that can influence muscle strength gain. However, some athletes still resist using it because they believe it can negatively influence their performance. The aim of this study was to analyze the acute effect of the use of mouthguards on muscle strength performance through a systematic review. An extensive article search was performed, with only articles published before May 2021, using PubMed, Scopus, Web of Science, Latin American, and Caribbean Health Science Literature (LILACS) databases. 12 studies were selected for this systematic review. Five of the selected articles revealed that the use of mouthguard had significant beneficial effects on anaerobic performance tests, six showed no significant difference and only one had a negative impact. It is concluded that the present study supports and defends the use of mouthguards in athletes so that their performance is not affected.

Keyword: Performance. Mouthguardl. Athlete.

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