

The Effects of ArmourBite® Mouthpiece Use on Baseball Pitching Velocity

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Performance Mouthpieces, particularly ArmourBite® (Bite-Tech Corp), are becoming more and more prevalent among rotational sports such as baseball. There is limited research to date examining these mouthpieces and any direct effect on pitching velocity (mph).

PURPOSE: To investigate the possible effect on pitching velocity (mph) when wearing and not wearing a mouthpiece, ArmourBite® (Bite-Tech Corp), during several offseason training periods.

METHODS: Subjects, amateur and professional baseball pitchers, were asked to take part in Personal Adaptive Joint Threshold Training, 1 day a week, over a 6 week training period at the Rod Dedeaux Research & Baseball Institute. Subjects would train with 6 differently weighted training baseballs, 2lb., 1lb., 6oz., 5oz. (regulation baseball), 4oz., 2oz., during a training session (6 total). Subjects would alternate throwing with and without ArmourBite® mouthpiece, in 2 pitch increments, while velocity was actively recorded by a standard radar speed gun. Ten (n=10) subjects were asked to complete the training protocol while alternating with and without ArmourBite®. Pitching velocity (mph) of all subjects were recorded for each of the 6 differently weighted training baseballs per session with and without the use of ArmourBite®, and the averages were recorded.

RESULTS: The use of the mouthpiece elicited an average of 2 mph increase in pitching velocity among all subjects for all 6 variously weighted training baseballs, including a 5 oz. weighted baseball (regulation weight).

CONCLUSION: This study suggests that the use of a mouthpiece (ArmourBite®) may be used to directly increase pitching velocity amongst amateur and professional baseball pitchers.