Effects of instant coffee on pitch speed, pitch accuracy and the consistency of throws

Little is known what effects caffeine from instant coffee has on pitching performance in baseball. We tested a highly-caffeinated coffee product, Via® instant coffee (VIA) vs. its decaffeinated version (DCF) on college students (18–25 years) with overhand throwing experience. We hypothesized that VIA would enhance pitch speed, pitch accuracy, and the consistency of throws (p<0.05). 14 college aged men and women (18–25) participated in this randomized, double-blind crossover study. Subjects were experienced throwers and consisted of athletes ranging from baseball, softball, and volleyball. Subjects reported to the testing facility in a fasted state and ingested either VIA or DCF 60 minutes prior to testing. Each participant completed a standardized 15 minute warm up. Subjects then threw 10 maximal throws at a 61 square cm target, placed 18.3 m away, using a standard collegiate baseball. Data were analyzed using a commercial radar gun and video recordings (Dartfish 6.0, Fribourg, Switzerland). Subjects returned a week later and completed the alternate intervention. Dependent t-tests were used to compare the speed and accuracy between VIA and DCF groups (Statistica 12, StatSoft, Inc., Tulsa, OK). Pitch consistency was analyzed by comparing coefficient of variation between interventions. These data only partly support our hypothesis that, caffeine enhances pitch speed, pitch consistency and the accuracy of a throw. That is, pitch speed was enhanced while accuracy tended to decrease and consistency was unaffected.

Biography

Lonnie Lowery is an exercise physiologist, Registered Dietitian, and Associate Professor at the University of Mount Union, He has 20 years experience in teaching and he has published nearly 20 papers in different types of Journals.

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