

# Bicarbonate adds fizz to players' tennis performance

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Dietary supplementation with sodium bicarbonate (baking soda) on the morning of a tennis match allows athletes to maintain their edge. A randomized, controlled trial reported in BioMed Central's open access *Journal of the International Society of Sports Nutrition* found that those players who received the supplement showed no decline in skilled tennis performance after a simulated match.

Provided by BioMed Central

Chen-Kang Chang from the National Taiwan College of [Physical Education](#), Taiwan, worked with a team of researchers to carry out the study. He said, "We found that [sodium bicarbonate](#) supplementation can prevent the fatigue-induced decline in skilled tennis performance seen during matches. The service and forehand ground stroke consistency was maintained after a simulated match in the bicarbonate trial. On the other hand, these consistency scores were decreased after the match in the placebo trial".

The nine players in the study were randomly assigned to receive either bicarbonate or placebo drinks. They then took part in a tennis skills test before and after a simulated match. The skills test measured the accuracy and consistency of service and forehand and backhand ground stroke to both sides of the court. Speaking about the results, Chang said, "To our knowledge, this is the first study to show the effect of bicarbonate supplementation on skilled performance in racquet sports. Future research may include other tennis skills such as volleys and drop shots with the measurement of stroke velocity and running speed".

**More information:** Sodium bicarbonate supplementation prevents skilled tennis performance decline after a simulated match, Ching-Lin Wu, Mu-Chin Shih, Chia-Cheng Yang, Ming-Hsiang Huang and Chen-Kang Chang, *Journal of the International Society of Sports Nutrition* (in press), [www.jissn.com/](http://www.jissn.com/)

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