

## Kavouras et al, 2011 – Educational intervention on water intake improves hydration status and enhances exercise performance in athletic youth

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### Introduction

It has been well documented that a large percentage of both amateur and professional athletes start their training and/or competitions inadequately hydrated. Furthermore, even in optimal conditions with water and/or sports drinks availability, athletes of all ages tend to become dehydrated during exercise. Therefore, the purpose of our study was to investigate the effect of a nutrition intervention program, emphasising water consumption on the prevention of dehydration and exercise performance in young athletes. A total of 92 young trained volleyball and basketball athletes participating in a five day training camp were randomised to either the control (CON) or the intervention (INT) group.

### Key Findings

More than 90% of the participants started the training camp inadequately hydrated. Only the INT group improved hydration status, resulting in enhanced running endurance performance, as a response to the intervention. No significant improvement in hydration or performance was found in the CON group.

### Relevance for health

This study showed that a simple educational program, consisting of a lecture on hydration, use of the urine color chart, improved water availability, and body weighting before and after exercise in some practices, was effective in improving hydration. We also found that improving hydration status by ad libitum consumption of water can enhance performance in young athletes exercising in the heat. Similar educational programmes can be used to effectively improve hydration and performance in free living active youth.