

## Title: Hydration during exercise – still confused with how much to drink?

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### ***Abstract (max 200 word)***

The negative effects of heat stress on endurance performance are well known. In order to optimise exercise tolerance in the heat, various strategies are employed to alter heat strain such as maximising aerobic fitness, heat acclimatisation, pre-exercise cooling and fluid ingestion. Specific to fluid ingestion, the recommended volume to ingest before and after exercise is widely accepted. There are however two differing views regarding fluid replacement during exercise - one stating athletes should aim to prevent fluid loss of >2% body mass while the other suggesting it is adequate to drink ad libitum. An individual's pre-exercise hydration status is an important factor determining the impact of fluid intake during exercise. The benefits of fluid ingestion during exercise are less pronounced in euhydrated individuals. In addition, the ingestion volume shown to reduce thermal and circulatory strain in many well-controlled laboratory studies is often not replicated during actual events. This presentation will cover key considerations when deciphering literature in this area in hope to augment recommendations specific to hydration during exercise.

### ***Brief Biodata (max 200 word)***

**Jason Lee** is an Associate Professor in Yong Loo Lin School of Medicine at the National University of Singapore. Jason obtained his first degree (Sports and Exercise Science – 1<sup>st</sup> Class Honours) from Loughborough University, UK. Following the award of G V Sibley Memorial Prize, he stayed on to complete a PhD in Exercise Physiology under sponsorship from the UK Overseas Research Scholarship and Faculty Studentship. Jason is a Fellow of the American College of Sports Medicine. He serves in various national and international panels related to human performance and safety. Jason's main research interests are in fluid balance, thermoregulation and mitigation strategies for improving human performance. He studies the physiological demands associated with passive and exertional heat stress and how humans adapt to ensure optimal performance and survival. A key outcome of his research is the formulation of a holistic heat management system. Jason recently completed his 12-year tenure at the DSO National Laboratories by directing the Human Performance Programme in his final appointment. He chairs for Scientific Committee on Thermal Factors at the International Commission on Occupational Health.