

Hydration Advice For Endurance Performance: Controversy Or Concurrence?

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Although the recommended volume of fluid ingestion before and after exercise is widely accepted, there are two dominant views regarding fluid replacement during exercise - one stating that athletes should aim to prevent fluid loss of >2% body mass while the other suggesting that it is adequate to drink ad libitum and cautioning against the adverse consequences of over drinking. Pre-exercise hydration status may determine the impact of hydration during exercise. As compared to hypohydrated individuals, euhydrated individuals may have a greater capacity to cope with variations in fluid and electrolyte intake when one is euhydrated. Many studies adopt some form of pre-exercise hypohydration protocol which may be abstinence from fluid intake exercise-induced or diuretic-induced dehydration. Studies using these experimental methods have produced results supporting the conclusion that dehydration significantly increases hyperthermia and cardiovascular drift. However, in an actual race, runners are more likely to start the race euhydrated than hypohydrated. The degrading effects of dehydration are often less pronounced, if any, when individuals commenced euhydrated. The impact of fluid provision on physiological responses and performance may therefore be dependent on hydration status.