Thermoregulatory Responses to Acute Exercise-Heat Stress and Heat Acclimation

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10.1002/cphy.cp040109
Source: Supplement 14: Handbook of Physiology, Environmental Physiology
Originally published: 1996
Published online: January 2011
Full Article on Wiley Online Library

Abstract
The sections in this article are:
1 Heat Stress
2 Thermoregulatory Control
3 Core Temperature
3.1 Measurement of Core Temperature
3.2 Core Temperature Responses to Exercise
4 Metabolism
4.1 Metabolic Rate
4.2 Skeletal Muscle Metabolism
4.3 Acclimation
5 Heat Loss Mechanisms
5.1 Evaporation
5.2 Heat Loss and Skin Blood Flow
5.3 Cardiovascular Support for Thermoregulation and Exercise
6 Heat Acclimation
6.1 Induction and Decay
6.2 Underlying Mechanisms
6.3 Dry vs Humid Heat
7 Biomedical Factors Modifying Exercise-Heat Performance
7.1 Aerobic Fitness
7.2 Dehydration
7.3 Circadian Patterns and Sleep Loss
7.4 Skin Disorders
7.5 Medications
8 Specific Populations
8.1 Women
8.2 Blacks
8.3 Children and Older Adults
8.4 Spinal Cord Injury

"Thermoregulatory responses to acute exercise-heat stress and heat acclimation". In Fregly, M. J.; Blatteis, C. M. Handbook of Physiology. Section 4: Environmental Physiology. "Sweat mineral-element responses during 7 h of exercise-heat stress". International Journal of Sport Nutrition and Exercise Metabolism. 17 (6): 574–582. PMID 18156662. Heat acclimation induces an increase in basal stores of the evolutionarily conserved molecular chaperone heat shock protein 72 (HSP72) [1, 2]. Additionally, HSP72 is induced by exposure to hypoxia at rest in humans [3]. These data demonstrate a degree of commonality in stress adaption and thus the potential to exploit cross acclimation in humans in preparation for exposures to different physiological. HSP72 can be released into the circulation in response to stress and may serve as part of the immune response [9, 10].