

## Physiological Changes Induced by Heat Acclimation

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**Abstract:** Heat acclimation (HA) induces key cardiovascular, thermoregulatory, and fluid-electrolyte adjustments resulting in reduced exertional heat illness risk and improve exercise-heat tolerance. Despite these well-known benefits among researchers, dissemination of this knowledge to stakeholders such as coaches, parents, administration, and athletes is lacking and requires attention. The purpose of this project is to increase awareness and knowledge of HA induction, the various adaptations derived from the process, the result of these adaptations, and how long these physiological adjustments last. HA is regarded as one of the most important preventative strategies for exertional heat illness, including exertional heat stroke. Proper implementation and maintenance of HA can significantly improve the safety and performance of individuals who chose to, or are required to be physically active when environmental temperatures are high.