高温環境下におけるフェンシング実施時の 体温調節反応に及ぼす着衣の影響

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Effects of Clothing on Thermoregulatory Responses During Fencing Practice in a Hot Environment

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ABSTRACT

This study was performed to analyze the effects of clothing on thermoregulatory responses during fencing practice in hot environments.

In experiment No.1, sweat rate, and fluid intake of college-aged male fencers (n=16) were measured during practice sessions held on several hot summer days under two conditions, i.e., with two different sets of clothing, T-shirts and short trunks (TS) and fencing uniforms (FU). During practice, fencers performed fundamental actions and footwork, wearing TS, and also performed matches and lessons with a saber, wearing FU. The fencers were allowed free access to a sports beverage during the practice sessions. The environmental conditions (wet-bulb globe temperature, WBGT $[\ensuremath{\,^{\circ}}\xspace]$) varied during the study, with temperatures ranging from 17.2 to 29.1 $\ensuremath{\,^{\circ}}\xspace$.

Sweat rate and fluid intake during practice with both TS and FU increased according to