



During summer many judo training camps are held in places where temperatures are really high, and unfortunatelly not all sport venues are air-conditioned, being a challenge for the athletes to train or compete in conditions with extreme hot and humidity.

Best practices to protect athletes health and performance and during competition include heat acclimation (HA) complemented by preplanned and practised cooling and hydration strategies.





HEAT ACCLIMATION (HA)

Long-term preparation involves implementing a long-term HA strategy consisting of 10-14 days of consecutive passive and/or active exposures. Heat acclimation, using artificial hot enviroment (heat chamber, sauna, hot baths, overdressing) or heat acclimatisation (naturally **hot enviroment**) are some of the specific strategies.

Short-term heat mitigation strategies should be complementary to long term HA.



Education sorrounding cooling guidelines should be prepared for their event.



Hydration and **cooling strategies** alone are effective in alleviating heat strain and improving athletic performance in hot conditions, but evidence suggests they should be complementary to the adoption of HA.

Ice vest, ice hats/towels, cold water ingestion are some of the strategies to mitigate the impact of hea+ Cooling and hydration strategies should be individualised and well-practised.





PRACTICAL RECOMMENDATIONS FOR ATHLETES

1. Optimal HA for performance

Best Practice

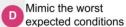




10-14 consecutive B Tc ≥38.5°C, Tsk ≥35°C, days (natural/artificial)



Minimum exposure ≥60 minutes



2. Improvise with effective alternative methods

NB: tolerance to these HA strategies should be built up gradually over time ideally, supervised by qualified personnel, monitored using body temperature measurement tools, to avoid adverse health risks

Best Practice



Utilise post-exercise sauna ≥80°C



Hot water immersion ≥40°C



Minimum exposure

Wear additional layers of clothing during training

3. Apply complimentary strategies

Best Practice



Hydration strategy:



Cooling strategy:



Avoid: GI disturbance & shivering prior to/during

≥30 minutes



Pratice/understand altered



Esh, C.J., Carter, S., Galan-Lopez, N.et al.A Review of Elite Athlete Evidence-Based Knowledge and Preparation for Competing in the Heat. J. of SCI. IN SPORT AND EXERCISE 6, 218–237 (2024)











CREATED BY: Felipe Sanchez