

# HINTSA Coach Education Day

## **Training and competing in extreme environments: References**

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The reference list is broken down in to sub-sections based on the session:

- Session 1. Physiological demands of driving in the heat
- Session 2. Beating the heat – acclimation, cooling, and hydration strategies
- Session 3. Hypoxic training for physiological adaptations

The names are hyperlinked to the PubMed listing.

### Session 1. Physiological demands of driving in the heat

Slide(s)	Authors	Year	Title	Journal	Vol	Pages
7, 13, 14, 15, 18	<a href="#">Galloway &amp; Maughan</a>	1997	Effects of ambient temperature on the capacity to perform prolonged cycle exercise in man	<i>Medicine and Science in Sports and Exercise</i>	29	1240 – 1249
10, 11	<a href="#">Nybo &amp; Nielsen</a>	2001	Hyperthermia and central fatigue during prolonged exercise in humans	<i>Journal of Applied Physiology</i>	91	1055 – 1060
14	<a href="#">Lafrenz et al.</a>	2008	Effect of ambient temperature on cardiovascular drift and maximal oxygen uptake	<i>Medicine and Science in Sports and Exercise</i>	40	1065 – 1071
18	<a href="#">Tyler and Sunderland</a>	2008	The effect of ambient temperature on the reliability of a preloaded treadmill time-trial	<i>International Journal of Sports Medicine</i>	29(10)	812 – 816
21, 23	<a href="#">Brearley and Finn (2007)</a>	2007	Responses of motor-sport athletes to v8 supercar racing in hot conditions	<i>International Journal of Sports Physiology and Performance</i>	2(2)	182 – 191
21, 23	<a href="#">Carlson et al.</a>	2014	Physiological strain of stock car drivers during competitive racing	<i>Journal of Thermal Biology</i>	44	20 – 26
21, 22	<a href="#">Jareno et al.</a>	2010	Heat stroke in motor car racing drivers	<i>British Journal of Sports Medicine</i>	21(1)	48
21, 22	<a href="#">Potkanowicz</a>	2015	A Real-Time Case Study in Driver Science: Physiological Strain and Related Variables	<i>International Journal of Sports Physiology and Performance</i>	10(8)	1058 – 1060
21, 22, 23	<a href="#">Walker et al.</a>	2001b	Performance enhancement in rally car drivers via heat acclimation and race simulation	<i>Comparative Biochemistry and Physiology</i>	128(4)	701 – 707
22	<a href="#">Jacobs and Olvey</a>	2000	Physiological responses to high-speed, open-wheel race car driving	<i>Medicine and Science in Sports and Exercise</i>	34(12)	2085 – 2090
22, 23, 91	<a href="#">Walker et al.</a>	2001a	The combined effect of heat and carbon monoxide on the performance of motorsport athletes	<i>Comparative Biochemistry and Physiology</i>	128(4)	709 - 718
22	<a href="#">Watkins et al.</a>	2006	The physiology and pathology of formula one Grand Prix motor racing	<i>Clinical Neurosurgery</i>	53	145 – 152

**Session 2. Beating the heat – acclimation, cooling, and hydration strategies**

Slide(s)	Authors	Year	Title	Journal	Vol	Pages
38	<a href="#">Taylor</a>		Human Heat adaptation	<i>Comparative Physiology</i>	4(1)	325 – 365
39, 40, 41	<a href="#">Tyler et al.</a>	2016	The Effects of Heat Adaptation on Physiology, Perception and Exercise Performance in the Heat: A Meta-Analysis	<i>Sports Medicine</i>	46	1699 – 1724
46, 47	<a href="#">Tyler et al.</a>	2015	The effect of cooling prior to and during exercise on exercise performance and capacity in the heat: a meta-analysis	<i>British Journal of Sports Medicine</i>	49	7 – 13
48	<a href="#">Gonzalez-Alonso et al.</a>	1999	Influence of body temperature on the development of fatigue during prolonged exercise in the heat	<i>Journal of Applied Physiology</i>	86(3)	1032 – 1039
51, 52	<a href="#">Cuttell et al.</a>	2016	A Comparison of 2 Practical Cooling Methods on Cycling Capacity in the Heat	<i>Journal of Athletic Training</i>	51(7)	525 – 532
52	<a href="#">Ansley et al.</a>	2008	The effects of head cooling on endurance and neuroendocrine responses to exercise in warm conditions	<i>Physiological Research</i>	57(6)	863 – 872
52	<a href="#">Katica et al.</a>	2017	Impact of upper body precooling during warm-up on subsequent time trial paced cycling in the heat	<i>Journal of Science and Medicine in Sport</i>	16	
52	<a href="#">Lee et al.</a>	2014	Neck cooling and cognitive performance following exercise-induced hyperthermia	<i>European Journal of Applied Physiology</i>	114(2)	375 – 384
52	<a href="#">Sunderland et al.</a>	2015	Neck-cooling improves repeated sprint performance in the heat	<i>Frontiers in Physiology</i>	5(6)	314
52	<a href="#">Tyler et al.</a>	2011	Practical neck cooling and time-trial running performance in a hot environment	<i>European Journal of Applied Physiology</i>	110(5)	1063 – 1074
52	<a href="#">Tyler and Sunderland</a>	2011	Neck cooling and running performance in the heat: single versus repeated application	<i>Medicine and Science in Sports and Exercise</i>	43(12)	2388 – 2395
52	<a href="#">Tyler and Sunderland</a>	2011	Cooling the neck region during exercise in the heat	<i>Journal of Athletic Training</i>	46(1)	61 – 68
54	<a href="#">Lee et al.</a>	2008	Cold drink ingestion improves exercise endurance capacity in the heat	<i>Medicine and Science in Sports and Exercise</i>	40(9)	1637 - 1644

### Session 3. Hypoxic training for physiological adaptations

Slide(s)	Authors	Year	Title	Journal	Vol	Pages
74	<a href="#">Squires and Buskirk</a>	1982	Aerobic capacity during acute exposure to simulated altitude, 914 to 2286 meters	<i>Medicine and Science in Sports and Exercise</i>	14(1)	36 – 40
76	<a href="#">Gore et al.</a>	1997	VO2max and haemoglobin mass of trained athletes during high intensity training	<i>International Journal of Sports Medicine</i>	18(6)	477 – 482
78	<a href="#">Terados</a>	1992	Altitude training and muscular metabolism	<i>International Journal of Sports Medicine</i>	13(1)	206 – 209
79, 80	<a href="#">Levine and Stray-Gundersen</a>	1997	"Living high-training low": effect of moderate-altitude acclimatization with low-altitude training on performance	<i>Journal of Applied Physiology</i>	83(1)	102 – 112
81	<a href="#">Chapman et al.</a>	1998	Individual variation in response to altitude training	<i>Journal of Applied Physiology</i>	85(4)	1448 – 1456
83	<a href="#">Saugy et al.</a>	2016	Cycling Time Trial Is More Altered in Hypobaric than Normobaric Hypoxia	<i>Medicine and Science in Sports and Exercise</i>	48(4)	680 – 688
84	<a href="#">Hauser et al.</a>	2016	Similar Haemoglobin Mass Response in Hypobaric and Normobaric Hypoxia in Athletes	<i>Medicine and Science in Sports and Exercise</i>	48(4)	734 – 741
86	<a href="#">Lundby et al.</a>	2012	Does 'altitude training' increase exercise performance in elite athletes?	<i>British Journal of Sports Medicine</i>	46(11)	792 – 795
87	<a href="#">Siebenmann et al.</a>	2012	"Live high-train low" using normobaric hypoxia: a double-blinded, placebo-controlled study	<i>Journal of Applied Physiology</i>	112(1)	106 – 117
88, 89	<a href="#">Bonetti and Hopkins</a>	2009	Sea-level exercise performance following adaptation to hypoxia: a meta-analysis	<i>Sports Medicine</i>	39(2)	107 – 127