

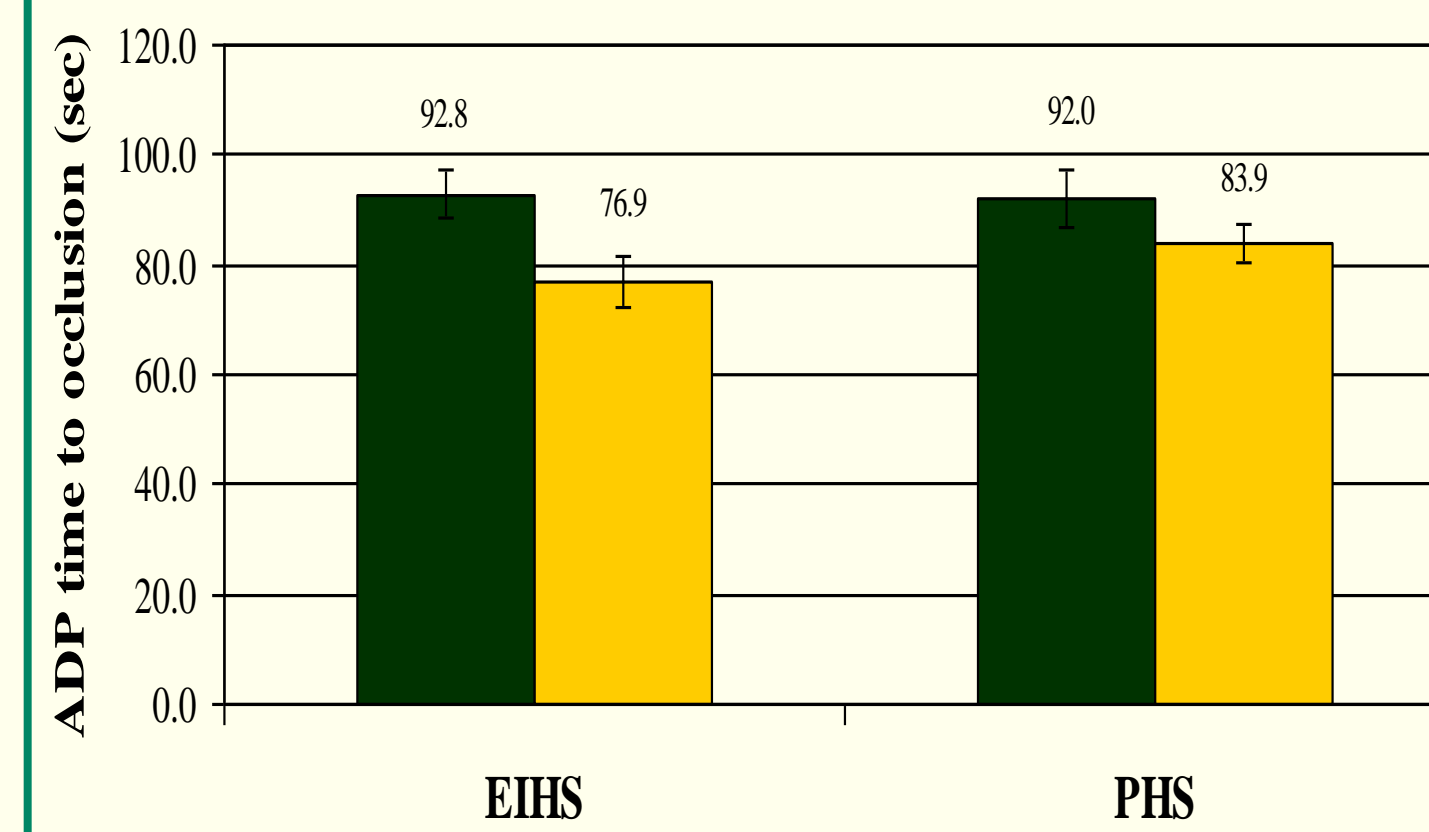
Effects of Heat Stress on Platelet Function and Coagulatory Potential



Purpose

Selected Variables	EIHS			PHS		
	Pre	Post		Pre	Post	
Temperature, C	37.3 ± 0.4	38.4 ± 0.2	1.1 ± 0.3	37.3 ± 0.3	38.5 ± 0.1	1.2 ± 0.3
Body Weight, kg	79.6 ± 7.4	78.9 ± 7.6	0.7 ± 0.6	78.9 ± 7.4	78.2 ± 7.3	0.7 ± 0.4
Thermal Sensation	4.2 ± 0.4	7.0 ± 0.5	2.8 ± 0.5	4.0 ± 0.6	6.7 ± 0.8	2.7 ± 0.7
Time to Achieve, min	—	—	51.1 ± 8.8	—	—	46.7 ± 11.3
Plasma volume, %	—	—	- 10.2 ± 3.9	—	—	- 6.1 ± 3.3

Values are expressed as the mean ± SD



Hematological Variables	Condition	Pre	Post	%	P value, student t-test
RBC, ×10 ⁶ ul	EIHS	5.1 ± 0.4	5.4 ± 0.3***	6.2%	p<0.001
	PHS	5.1 ± 0.3	5.3 ± 0.3***	4.0%	p<0.001
WBC, ×10 ³ ul	EIHS	6.8 ± 1.6	8.4 ± 2.4**	23.0%	p<0.01
	PHS	6.6 ± 1.8	6.8 ± 2.2	3.2%	p=0.221
Platelet Number, ×10 ³ ul	EIHS	255.4 ± 46.0	311.6 ± 67.0***	22.0%	p<0.001
	PHS	251.2 ± 45.8	266.0 ± 53.7***	5.9%	p<0.001
Mean Platelet Volume, fl	EIHS	9.2 ± 0.8	9.1 ± 0.9	1.0%	p=0.220
	PHS	8.9 ± 0.7	9.0 ± 0.7	1.22%	p=0.108
Hematocrit, %	EIHS	44.7 ± 2.5	47.4 ± 2.5***	6.1%	p<0.001
	PHS	44.5 ± 2.4	46.1 ± 2.3***	3.4%	p<0.001
Hemoglobin, g/dl	EIHS	15.4 ± 0.8	16.3 ± 1.0***	6.0%	p<0.001
	PHS	15.3 ± 0.9	15.9 ± 0.9***	3.7%	p<0.001