Effect of acute normobaric hypoxia on cognitive and psychomotor function in recreational athletes


High altitudes do affect physical work, subjective fatigue, and task performances. This study evaluated whether sleeping in a normobaric hypoxic tent at a simulated altitude of 2,500 m affected cognitive and psychomotor performance.

Male recreational athletes (N = 8) were exposed to normobaric hypoxia (2,500 m), normobaric normoxic (placebo), and normal air conditions in a randomized order for three consecutive nights. Measures were obtained on the Critical Flicker Fusion Threshold, Hick's Choice Reaction Time, Compensatory Tracking Task, and Sternburg's Short Term Memory scanning task.

CONCLUSION: No significant differences were revealed for the two conditions involving the hypoxic tent. Hypoxic Tents Do Not Affect Psychomotor Or Cognitive Factors.