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[Effect of caffeine in the performance of cyclists under high thermal risk]

[Article in Portuguese], [Ferreira GM](#), [Guerra GC](#), [Guerra RO](#). Departamento de Fisioterapia/UFRN.

PURPOSE: To verify the effect of caffeine on yield time, the tympanic temperature and body weight with the administration of 5 and 9 mg/kg doses of caffeine and placebo, in cycling races under high thermal risk conditions. **METHODS:** Eight highly-trained cyclists were studied in 3 races of 45 km using the experimental model and double-blind with intra-subjects randomized. **RESULTS:** Air temperature ranged from 28.5 and 32 degrees C and humidity between 71 e 78% with an index of WBGT varying between 24.5 degrees and 27 degrees C, figures that indicate high thermal risk. No significant differences were observed between variables assessed, yet yield time was lower with doses of 5 and 9 mg/kg caffeine than with placebo. **CONCLUSION:** These data indicate that heat and humidity conditions may be sufficient to mask the ergogenic benefit of caffeine in cycling races of prolonged duration. Therefore, isn't justifiable it's utilization in high thermal risk conditions.