

Determination of blood glucose threshold in boys: descriptive analysis #9

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The blood glucose threshold (GT) has been used for the assessment of the aerobic capacity for trained individuals in replace of the blood lactate and ventilatory parameters for anaerobic threshold determination. But, there are no studies with boys. The purpose of this study was to measure the intensity corresponding to the GT in a group of boys. Eight boys (11 ± 1.12 years; 38 ± 6.93 kg; 1.44 ± 0.09 m; 18 ± 1.79 kg/m²) performed a graded maximal exercise test on a cycloergometer to determine the Watts peak (WP), heart rate maximum (HRmax), Watts at GT (GT_w) and heart rate at GT (GT_{hr}). The initial intensity was 15 Watts with 15 Watts of increment every three minutes. The results showed (M \pm SD) that the WP was 128 ± 12 ; HRmax: 193 ± 10.64 ; GT_w: 96 ± 19.47 ; GT_{hr}: 161 ± 20.08 . The GT was at $75\pm 11.97\%$ of the WP. The results were similar to those reported in studies with children using other physiological variables for anaerobic threshold determination. In conclusion, the study shows that GT is possible to be determined in boys during incremental test.

Key words: blood glucose threshold; young boys; incremental test.