Chiropractic treatment, Gonstead technique, to determine the measurement of blood lactate and heart rate in amateur athletes

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Lactate is an important indicator used energy metabolism during exercise. Resting values are between 0.5 and 2.2 mmol/l in plasma. The maximum blood lactate concentrations usually found between 10-12 mmol/l due to increased glycogen stores and better ability to obtain energy by anaerobic metabolic pathways. Determining the concentration of blood lactate and heart rate in amateur runners subjected to physical activity before and after chiropractic treatment, at UNEVE. We used n=34 runners, divided into two groups with and without chiropractic treatment. The heart rate is performed and taking the lactate samples at 5, 8, 11 and 14 minutes. In the linear fit of submaximal heart rate (sMxHR) and lactate (mmol/L) in male athletes with and without chiropractic treatment, it is shown noticeably has a greater tendency fastest growing lactate to changes in the (sMxHR) treatment group than without it; a rate of increase of lactate in the treatment group 1.07 per unit growth of the sMxHR. As for the untreated group, the rate was just 1.05 units. The female group with treatment the correlation of sMxHR and lactate was 0.74 with an increase of 1.07 unit's lactate for every unit of sMxHR and in the untreated group of 0.67 with growth rate of 1.06 units. It is concluded that chiropractic treatment holds in both groups, the lactate and sMxHR below that were not subject to treatment and the increase for both indicators was less in the subjects with treatment than without it.

Biography

Graciela Campos Garcia has completed her Doctor of Chiropractic degree at University of Valley of Ecatepec (UNEVE) and; Master's degree in Science Sport Medicine at University of Puebla and University of Pablo Olavide. She is a Faculty member and Researcher at UNEVE.

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