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Immediate Effects of Fartlek Training on Blood Lactate Levels – Post-exercise in a Recreational Runner: A Case Study

AVNEET KAUR SAINI[1], ADITI UPMANYU[2*], AMIT KUMAR[3]

ABSTRACT

Fartlek training, a form of unstructured interval training, involves alternating between periods of high and low intensity during a single workout session. It is widely adopted by recreational and competitive athletes for enhancing both aerobic and anaerobic capacity. Blood lactate concentration is a key biomarker used to assess metabolic stress and performance adaptation following high-intensity exercise. While traditional interval training's impact on lactate dynamics is well-documented, there is limited research on the immediate effects of Fartlek training on blood lactate levels, particularly in recreational runners. Oxygen saturation (using pulse oximeter), pulse rate (breaths per minute), physical activity (6-minute walk distance) and perceived levels of exertion (RPE) using modified Borg scale corresponding to pre and post levels of blood lactate were measured in 19-year-old recreational runner. Before investigating the levels of blood lactate, participant performed 6-minute walk distance to quantify the physical exertion. The distance covered by participant was 690 metres. Pre and post blood lactate levels in participant were 11.40 mg/dL and 12.50 mg/dL respectively. According to the reports, participant maintained the normal limits of blood lactate levels. With this we can conclude that there is no or minimal effects of Fartlek training.

Keywords: Exercise, Oxygen saturation, Physical exertion

PARTICULARS OF CONTRIBUTORS:
1. Master of Physiotherapy (Orthopaedics), Registration number: 12406569, School of Allied Medical Sciences, Lovely Professional University.
2. Assistant Professor, School of Allied Medical Sciences, Lovely Professional University, Phagwara-Punjab.
3. Clinical Physiotherapist, Kinetik Cure Physiotherapy Centre Pinjore Haryana.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
*Aditi Upmanyu
Assistant Professor, School of Allied Medical Sciences, Lovely Professional University, Phagwara-Punjab.
Amit Kumar, Clinical Physiotherapist, Kinetik Cure Physiotherapy Centre Pinjore-Haryana.