

77 THE CHRONIC EFFECT OF PLYOMETRIC TRAINING ON HAEMOTOLOGICAL PARAMETERS IN ALPINE SKIERS

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The aim of this study was to determine and evaluate chronic effects of plyometric training on haematological parameters of the Turkish National Alpine Ski Team athletes during 12-week preparation period. In the study, 12 sportsmen volunteers participated whose mean age was 17.50 years. Participants performed 12-week plyometric training protocol. The training programme was applied for 12 weeks and 5 days a week in total 60 training unit. As the programme proceeded, the

intensity and content of training increased. Blood samples were taken before and after the training programme. The red blood cell (RBC), white blood cell (WBC), granulocyte (GR), haematocrit (HCT), haemoglobin (HGB), mean corpuscular volume (MCV), mean corpuscular haemoglobin (MCH), mean corpuscular haemoglobin concentration (MCHC) measurement were analysed on blood samples with automatic haematological analyser (Toshiba Accute PPS TBA-40FR). Wilcoxon signed rank test was used in order to compare statistical values of before and after exercise and significance level α was set at 0.05. Before and after training programme, values were compared for RBC, WBC, GR, MCV, MCH, MCHC and no significant changes have been observed for these values. However, there was significant ($p>0.05$) increase in HCT and HGB values. We concluded that as a result of the study, 12-week plyometric training programme increased the RBCs and HGB levels and as a result improved oxygen carriage capacity of the Turkish National Alpine Ski Team athletes.