Table 1) mean of hematologic factors before and after endurance activity and after recovery period in volunteers in young age group (30 persons), middle aged group (30 persons) and elderly group (n=27) in Sarem Hospital of Tehran

Variables	Young Age Group	Middle Aged Group	Elderly Group
MCV (Cubic micrometer)			
Before	86.6±4.0	87.0±4.8	87.8±4.1
After	86.5±3.7	86.6±5.2	88.0±4.0
Recovery	86.7±3.8	86.8±4.7	88.2±4.0
MCH (Picogram)			
Before	29.6±1.3	29.6±1.6	30.3±1.2
After	*29.8±1.4	*29.8±1.9	*30.6±1.2
Recovery	29.7±1.3	29.7±1.3	30.5±1.3
MCHC(g/dl)			
Before	34.1±1.1	34.0±1.5	34.5±1.0
After	*34.2±1.2	*34.2±1.6	*34.8±1.3
Recovery	34.1±1.1	34.1±1.5	34.4±1.3
White Cell Count ($X10^{12}$per liter)			
Before	5.17±0.2	5.5±1.2	5.7±1.1
After	*7.1±1.3	*7.1±1.2	*6.7±1.3
Recovery	$5.5±1.04	$5.3±1.1	$5.2±1.0
Platelet ($x10^9$ per liter)			
Before	195±33	206±44	198±49
After	*238±37	*240±54	*230±56
Recovery	$193±40	$211±40	$201±53

* Significant difference between before and after activity; and $ Significant difference between after activity and recovery period

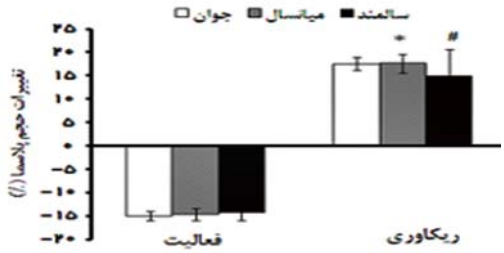

Figure 1) The mean of the percentage of plasma volume changes during endurance activity and recovery period in volunteers in young age groups (30 persons), middle aged (30 persons) and elderly (27 persons) in the Saram Hospital of Tehran

* Significant difference between after-activity and recovery periods; # Significant differences in recovery period in elderly group with middle aged and young aged groups

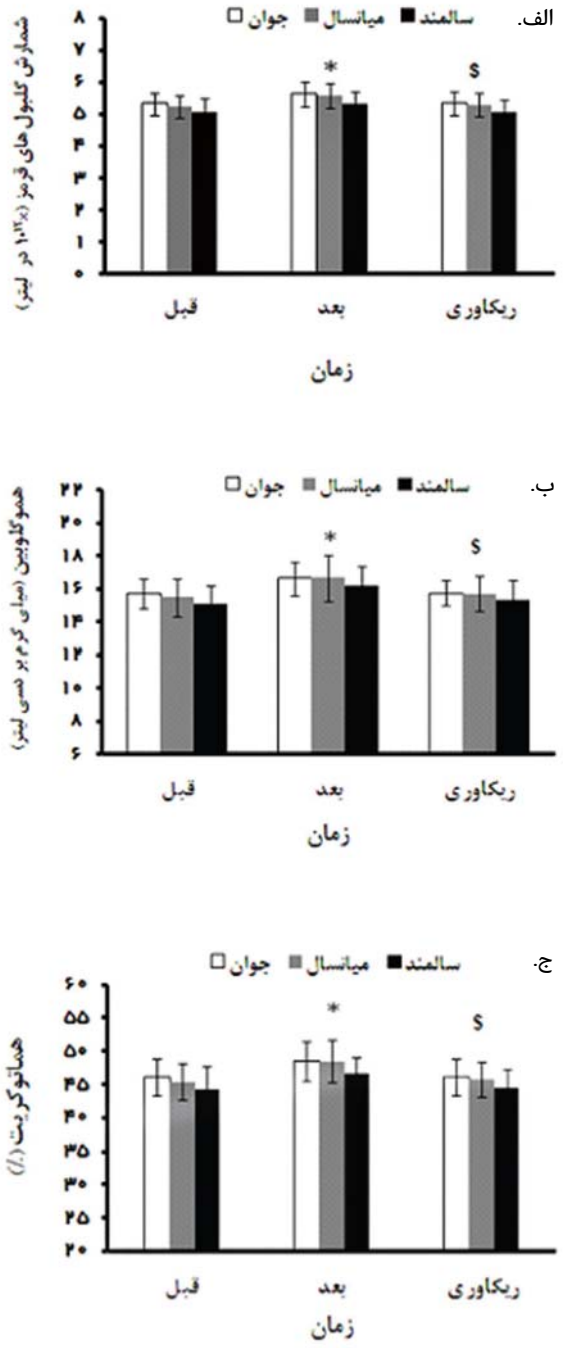

Figure 2) The mean of (a) red cell count, (b) hemoglobin values, and (c) hematocrit percentage before and after endurance activity and after recovery period in volunteers in young aged group (30 persons), middle aged group (30 persons) and the elderly group (27persons) at the Saram Hospital in Tehran
* Significant difference between before and after activity; $ Significant difference between post-activity and recovery period