

Biochemical Parameters in Professional Male Footballers Before and After Training

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ABSTRACT The goal of this study is exploring serum alterations related to acute coronary sendrom, muscle deterioration, hypoglysemia and the other variables in the serum of the fifteen footballers. Fifteen professional male footballers (mean (SD) age: 24 (4.4) years) were gathered from a 3rd league team. Blood samples were collected from them before and after exercise. Blood samples were analyzed by standard methods and the results were corrected in the biochemistry laboratory. The average pre- and post-exercise biochemical values of 15 footballers are found below. The glucose in the serum is 62.3 ± 3.9 (before) and 69.5 ± 7.8 (after) ($P < 0.05$) for pre- and post-exercise, respectively. The urea in the serum is 36 ± 9.5 (before) and 34.4 ± 9.2 (after) ($p > 0.05$). The creatine in the serum is 0.9 ± 0.1 (before) and 0.8 ± 0.9 (after) ($p > 0.05$). The CK in the serum is 309.9 ± 200.9 (before) and 253 ± 149.7 (after) ($p > 0.05$). The CK-MB in the serum is 17.9 ± 6.3 (before) and 14.5 ± 5.4 (after)($p > 0.05$). The total bilirubin in the serum is 0.8 ± 0.4 (before) and 0.8 ± 0.5 (after) ($p > 0.05$). The albumin in the serum is 4.1 ± 0.3 (before) and 4.1 ± 0.2 (after) ($p > 0.05$). The BUN (blood urea nitrogen) in the serum is 16.7 ± 4.4 (before) and 16.3 ± 4.5 (after) ($p > 0.05$). Although broad variety of biochemical perturbations is present during acute physical stress, many parameters remain within regular limits.