

The Effect of Detraining and Intensive Training on Asymmetric Dimethylarginine and Homocysteine: A Study of Cardiovascular Disease Risk Factors in Elite Young Athletes

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ABSTRACT The aim of the present study was to investigate the effects of a 12 week detraining after a 16 week multicomponent training program including strength, anaerobic and aerobic exercises on the main determinants of Asymmetric Dimethylarginine (ADMA), homocysteine (Hcy) and some physiological markers. For this purpose, twenty-three well-trained young wrestlers (14.9 ± 1.1 yr, 46.6 ± 9.9 - 49.4 ± 9.6 kg, 18.7 ± 2.3 - 19.1 ± 2.0 kg/m²) volunteers were assigned into training (n = 24) and control (n = 13) groups. ADMA and Hcy were significantly higher during training season in wrestlers compared to control ($P < 0.05$). However, ADMA and Hcy were not significantly in control group compared to detraining season. There was no significant difference in training season between detraining season in wrestlers ($P > 0.05$).