The overweight is widely spread in developed countries. Obesity has reached epidemic proportions in the United States. More than 60 percent of U.S. adults for example are now overweight or obese (1). In Europe between 40 and 50% of males are overweight and between 10 and 20% are obese. In females these percentages are respectively 10-20 and 25-35 (2). Most of the people with a Body Mass Index over 25 are under health risk of many diseases and health conditions, including hypertension, dyslipidemia, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, some cancers etc. (3). The aim of this study was to evaluate the changes of some parameters of body composition in a group of 33 subjects (28.9±8.5 ys old) with overweight (BMI between 25 and 30) following a special training program and restrictive diet for a period of 8 weeks. Methods The body mass (BM), body fats (BF), body water (BW), visceral fats (VF), and 10 skin folds were measured at the beginning of the study and at the end of each week until the end of the study. All the data were processed statistically by using paired t-test and were presented as mean±SD. During the study, all subjects practiced moderate training 4 days a week, 2 hours each session. The restrictive diet was elaborated individually in accordance with the individual BMI and basal metabolic rate. Results It was found out 6.8% BM reduction during the eight-week period (p<001). The stepwise reduction was significant in each study: from 84.50±20.58 kg starting BM to 80.20±19.30 kg at the end of the first week, to 79.06±16.10 kg – at the end of the eight week. BF were reduced 13.6% (p<0.001) at the end of the experiment, and the body water increased 3.6% (p<0.001). The VF which was also reduced significantly. The subscapular skin fold decreased 51.5% (from 27.28±11.50 to 18.00±8.10 mm at the end of the study, p<0.001), and the abdominal skin fold – 41.3% (from 30.91±12.32 to 21.88±7.26 mm, p<0.001). Conclusions The overweight people require individual managing using appropriate training program and restricted diet. This gives positive results even at the first week of manipulation.

References:

Keywords: Body Composition, Overweight, Physical Activity