

Effects of training program on lifeguards of fire department of Rio De Janeiro

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Introduction

In recent years, there has been a decrease in the level of the Physical Fitness Test (FST). This test consists of estimating the performance of cardiopulmonary and neuromuscular military twice a year to assess the ability or resistance against a maximal effort physical exercise, especially in military administrative and operational functions. Among several reasons for the decreasing rates of TAF, there is a lack of monitoring of a professional education for the prescription of physical training.

Objective

To investigate the changes in the values of VO₂max. and the physical qualities of strength and muscular endurance of the abdomen and upper limbs in lifeguards (GV) of the Fire Department of Rio de Janeiro (CBMERJ) after a program physical training wave.

Sample

Participants were 43 males, 21 were insufficiently active working with the administrative tasks (control), mean age 26 ± 2.25 years and 22 individuals sufficiently active, practicing moderate exercise 3–5 times a week with a mean age of 27.21 ± 3.32 years.

Materials

The subjects underwent the following initial and final anthropometric measurements: weight measures (P), height (H) and percent body fat (% BF) through the skin fold (SF) (chest, abdomen and thigh). The measurement of P and E were performed through Filizola (Industry Filizola S / A, São Paulo, Brazil) with a capacity of 150Kg and precision of 50g. The BMI (Body Mass Index) was obtained by dividing the P on E squared (P / E)², and % BF was measured using a compass skinfold Lange (Cambridge Scientific Industries, Cambridge, MD) with accuracy of 0.1 mm, following the protocol of Jackson & Pollock (1985).

Methods

All participants volunteered for the study and underwent a wave of progressive strength training for endurance three times a week and aerobic running on asphalt and swimming in the sea, five times a week for 24 weeks of training. All samples were subjected to the following tests: 12 minute run (CT) (Cooper, 1968), arm strength in the flat bar (FBBF) (Aahper, 1976), abdominal flexion in 1 minute (RA) and flexing of the arms soil (FBS) (Pollock & Wilmore Protocols, 1993), measured at two different times: before the intervention and post-intervention. Statistics: For data analysis we used the paired Student t test and non-test (p < 0.05). Data were expressed as mean with confidence interval (CI) of 95% and p-value of 5%. We used the program Excel for Windows for statistical analysis.

Results

The analysis of results showed that there was a significant difference (p < 0.05) among all anthropometric measurements of BMI and % BF and physical abilities investigated (CT FBBF, RA, FBS) between those two groups.

Conclusion

Based on results, the FBS showed the highest variation, followed by VO₂max., RA, and FBBF G% after the intervention period. We suggest further studies to develop assessment standards and exercises aimed at improving physical fitness in terms cardiopulmonary and neuromuscular performance of military operational and administrative functions of CBMERJ.

Keywords:

training, lifeguards, fitness test.

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