LIFEGUARD TRAINING EFFECTS ON THE PHYSICAL AND ANTROMETRICS AT FIRE DEPARTMENT OF RIO DE JANEIRO

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Introduction: Surf Lifeguard course (CSMar) of the Fire Department of Rio de Janeiro (CBMERJ) has existed since 1983, where recruits enter through physical tests of aerobic capacity: TCA (Cooper, 1968); Test Repetition of Abdominal (RA) and Flexion Arm Ground in 1 minute (FBS) (Pollock, Wilmore and Fox, 1994); Repeated Bending Test of Arm in the Horizontal Bar (FBBF) (Aahper, 1976); 600m(T600) and 100m(T100) swimming time recorded at swimming pool; and 50m submerse swiming (A50)). Although, the training of strenuous running, swimming and muscular endurance run for hours throughout each training session so far there are no studies that measure or evaluate the indexes of physical fitness of students in order to establish whether the planning physical training program itself of course was effective or not. **Objective**: To measure and evaluate the anthropometric measurements, physical tests and time of swimming in a group of students in the CBMERJ-CSMar 2007, before starting the course and after the intervention of physical training program. **Sample**: Participants were 19 male volunteers, active military, aged 27.46 ± 3.32 years. **Materials**: The subjects underwent assessments of anthropometric measures of weight (W), height (H) and skinfolds (triceps, subscapular, suprailiac and abdomen). The weighing and measuring the stature were made through Filizola (Industry Filizola S / A, São Paulo, Brazil) with a capacity of 150Kg and precision of 50g. The Body Mass Index (BMI) was obtained by dividing

weight over height 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), neuromuscular evaluations consisted of TCA, RA, FBS, FBBF, T600, T100 and A50. **Methods**: All samples were subjected before and after intervention with a time interval of 30 weeks. Measures were: a case history (CEFID, 2005???), PAR-Q, fat mass (FM), fat-free mass (MIG) and% G (Faulkner, 1968), P and E to calculate BMI (Bray, 1992), run test in 12 minutes (CT) (Cooper, 1968). The training program was progressive, with aerobic and anaerobic running in sand and at street as well as swimming in the ocean and pool alternate with a muscular endurance work pretty intense, five times a week for 30 weeks, with an average of 3 hours. Total work out has an average of 450 hours of training. **Statistics**: Data analysis was performed using the t-student test ($p < 0.05$) paired. Data were expressed as mean, standard deviation, confidence interval (CI) of 95% and p-value of 5%. The software used for analysis was Microsoft Office Excel 2003. **Results**: There were significant differences ($p < 0.05$) at post-test on measures of P (77.03 ± 10.16 x 74.08 ± 8.30), MG (13 05 ± 4.13 x 9.82 ± 2.33),% BF (17.32 ± 2.41 x 12.85 ± 3.66) and BMI (23.50 ± 1.65 x ± 21.20 1.32), except in the MIG (63.98 ± 6.73 x 64.26 ± 6.43) when compared to pretest. But the TC (47.38 ± 3.66 x 58.21 ± 5.12), RA (53.87 ± 4.56 x 62.41 ± 5.25), FBS (43.63 ± 8.12 x 65.12 ± 5.11), FBBF (11.12 ± 1.32 x 14.53 ± 2.21) and A50 (41.55 ± 6.12 x 46.88 ± 2.56) an increase in its result ($p < 0.007$), the T600 (686.16 ± 83.48 x 591.63 ± 77.44) and T100 (76.26 ± 9.56 x 71.95 ± 7.35) showed a decrease in time ($p < 0.007$). **Conclusion**: It is believed therefore that the training had an effect applied. We suggest further studies to develop, for the course on screen, assessment standards and exercises aimed at improving physical fitness of students in the CSMar CBMERJ in all its aspects.

Keywords: physical fitness, training, lifeguards, fitness test.

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