

**RUSSIAN STATE UNIVERSITY OF
PHYSICAL EDUCATION, SPORT AND TOURISM (RSUPE)
POLYCLINIC**

Moscow, Sirenev bulvar, 4; 105122

tel/fax: +7-495-166-49-72

**CLINICAL STUDY ON THE USE OF THE INDIVIDUAL RESPIRATION TRAINING
DEVICE FOR THE RESPIRATION TRAINING OF SPORTSMEN**

The clinical study of the individual respiration training device was done by a pulmonology specialist on the base of the Polyclinic of Russian State University of Physical Education, Sport and Tourism. We studied 32 healthy sportsmen of different specializations: swimming, athletics, wrestling, weightlifting, volleyball and basketball. The participants included 21 females and 11 males.

Prior to the training there was held a study of external respiration functioning (ERF), which aimed to determine the main characteristics: VC (Vital Capacity), FEV₁ (Forced Expiratory Volume), MEF₇₅ (Maximal Expiratory Flow), MEF₅₀ and MEF₂₅; the characteristics were within normal standards. The training was run during 2 weeks in the period between January and February of 2006; the exercises were held in the evenings after physical training and 1 hour after light dinner. First exercises lasted for 5 minutes; then their duration was extended to 20 minutes daily. Training tolerance was satisfactory among all the sportsmen.

After two weeks the ERF was measured again. The growth of all parameters was recorded: VC increased by 20%, FEV₁ increased by 25%, MEF₇₅ increased by 15%, MEF₅₀ increased by 20% and MEF₂₅ increased by 20%. No catarrhal diseases occurred during the covered period; the participants expressed their subjective opinion of increased adaptability to physical exercises. It was recognized that, due to the reflexogenic system of the respiratory trainings with the device, the automatism, which prevents the exertions exceeding the physiological standards, appears. Several weeks of trainings allow a person to be in a condition of increased endurance. This is effective for the increase of body functional abilities and for the evolvement of the proper respiratory pattern among sportsmen at sports and recreation organizations, and at medical centers.

RSUPE Polyclinics' Chief Doctor,
PhD Medical Sciences, Professor Smolensky A.V.
RSUPE Polyclinic's Pulmonology Specialist: Belousova O.M.