

# STUDY OF THE HEALTH RELATED PHYSICAL FITNESS IN UNIVERSITY TEACHERS AND STUDENTS OF CHINA

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**KEY WORDS:** intellectual, physical fitness, constitution, body composition

**INTRODUCTION:** The purpose of the study was to determine the actual constitution or physical characteristics of moderate and highly qualified Chinese intellectuals. Suggestions for their improvements in sports are proposed in accordance with their level of physical fitness.

**METHODS:** In order to study the constitution or physical characteristics of moderate and highly qualified Chinese, over 4000 teachers and students of Tsinghua University, including of 1062 teachers (783 males and 279 females) and 2977 students (2473 males and 504 females), were selected randomly to be tested. The age range is between 18 and 80 years. The items of examination included, body height, body weight, fat thickness of upper arm and back, vital capacity, and hand grip. Measurement methods conformed strictly to those set out by APPLIED PHYSICAL FITNESS (Cheng,1993). Data were calculated by computer software developed by FoxPro 2.5.

**RESULTS:** Based on the study of the physical characteristics of Chinese intellectuals, it would appear that their body composition is not acceptable in terms of a general state of health. Comparing these results with those of the Chinese nation-wide investigation in 1994, the intellectuals in the study group showed a high percentage of body fat ( $p < .01$ ). In addition, the lean-body-weight/weight index and composition of muscles are low ( $p < .05$ ); the vital capacity and its index are good ( $p < .01$ ); the grip/weight index is low and muscles strength is weak ( $p < .01$ ).

**DISCUSSION:** Results of the study show that the general health of Chinese intellectuals is seriously compromised, reflected in the fact that body fat is comparably high and muscle strength is low. These factors may result in a higher incidence of cardiovascular and cerebral disease and also degenerative diseases, such as atrophy, strain, osteoporosis and others (Fu & Yang, 1995). Good vital capacity of the subjects may be the result of regular exercise, but reflect a tendency to concentrate on endurance exercises while ignoring the strength training. Therefore, it is very important that the intellectuals should enhance muscle strength in addition to maintaining endurance exercises. Modifications such as these will increase lean body weight, change body composition, and ultimately improve their physical fitness and health.

## REFERENCES:

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