

## **Health Related Physical Fitness of Boys Aged 8 to 18 Years**

**Sunil Dutt , Ph.D.**

Govt. Senior Secondary School, Ghanaur, District Patiala, Punjab  
Email: sunildutt40@yahoo.com

### **Abstract**

Keeping in view the lack of information about health related physical fitness of young boys, the present investigation was carried out on 797 male children and youth belonging to Punjab and falling in the age range of 8 to 18 years. Four components of health related physical fitness namely cardiovascular endurance, muscular strength/endurance, flexibility and body composition were assessed using standard techniques. The results in general indicate a trend of improvement in cardio respiratory fitness of the boys belonging to the present study with increase in age. However when comparison is made with Prudential fitness gram standards Results indicate poor level of  $VO_2$  max in boys of the present study, the results of muscular strength and endurance, an important health related component of fitness indicate variations in its development with respect to different body regions in boys of the present study from age 8 to 18 years. The muscles related to the upper body region like triceps, deltoid, pectorals major etc. are observed to develop relatively better in their strength endurance ability than the muscles belonging to abdominal, hip and leg regions. It is believed that disproportionate development of muscular strength endurance in boys of the present study may be due to their habitual life style and a craze for some selected muscular strengthening exercises, like use of dumbbells, lifting weights etc. in order to develop their body for an attractive physical appearance. Average percent body fat of these boys at all age level is observed to fall in the health fitness zone. However the percent body fat of boys of the present study after the age of 14 years and onwards exhibit a sharp rise, which continues up to 17 years of age.

Key Words: % **Body fat, Flexibility, Cardiovascular endurance,  $VO_2$  max**

### **Introduction:**

Keeping in view the fact that childhood physical fitness has important health consequences during adulthood (*Sallis et al., 1992*) a large number of studies on physical fitness have been reported from different countries of the world. Data on the physical fitness of children from Denmark (*Knuttgen, 1961*), England (*Campbell & Pohndof, 1961*), South Africa (*Sloan, 1966*), Belgium (*Hebbelinck and Borms, 1969*), Israel (*Ruskin, 1978*) and Japan (*Ishiko, 1978*) are available in the literature. All these reports made the health planners realise the importance of the contribution of Health Education and Physical Fitness in the development of total fitness. The practice of physical testing in children started thereafter in various countries.

The interest in studies on physical fitness in India is of comparatively recent origin. The emphasis of researchers in India has remained mainly on the reporting of physical growth and development patterns among different populations inhabiting the country, as is evident from a large number of publications reported in the literature in the last fifty years (*Fabich & Hamburger, 1941; Dawer, 1946; Currimbhoy, 1963; Vijayraghavan et al (1971); Khanduja et al., 1967; Neumann et al., 1969; Sidhu, 1969; Singh and Meenakshi, 1969; Bhandari et al., 1972; ICMR, 1972 & 1989; Lall, 1972; Mehta and Merchant, 1972; Bhatnagar, 1975; Kansal, 1981; Verma, 1983; Verma, 1988; Kumar and Bhalla, 1988; Chatterjee and Mandal, 1994; Joshi, 1996; Nischint, 1998; Kumar, 2001 and Ajita, 2001.*