Chapter – 5

CONCLUSIONS AND RECOMMENDATIONS
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A. Conclusions

Following conclusions were arrived at within the limitations in the conduct of the study.

1. The athletic traits and characteristics of an individual can be explored depending upon physical fitness components.

2. Game-specific training has impact in varying degrees on improving different components of physical fitness parameters.

3. It was observed from the study that anthropometric parameters like height, weight have great influence on some of the physical fitness components. This observation was supported by previous findings.

4. Aerobic training has less impact for the improvement of VO2max as it can be expected from the training stimulus. This conclusion was arrived at comparing the VO2max values between trained and untrained and in between different sports groups in this study. This observation is in agreement with the previous findings that training has less impact to improve VO2max at pre-pubertal stage.

5. All the boys both athletes and untrained boys of two areas were poor in nutritional status. Some nutritional deficiency symptoms were prevalent in some boys of both regions.

6. This study found that tendency of macronutrients intake i.e. energy, carbohydrate, protein, fat intake were higher in most of the groups of Tollygunge area where as tendency to intake micronutrients specially vitamins intake were higher in Sonarpur boys.

7. The relation between nutritional intakes and physical fitness parameters while comparing between different groups of this study were contradictory and not in agreement with each other. It might be a cause that intake of macro and micronutrients in most of the groups were below standard level (ICMR recommendation).
8. It has been observed that environmental factors had impact on physical fitness components of boys. As a result, though, energy intake did not differ between the groups, some physical fitness components were higher in Sonarpur boys. Less polluted environment might have helped to improve some physical fitness components of both trained and untrained boys though quality of training in Tollygunge had impact on improving some components of trained boys in that area.

9. Higher intake of vitamin C and β-carotene in Sonarpur boys influenced to improve physical fitness components against the impact of pollution existing over there.

B. Recommendations

Considering different aspects of the present study following recommendations may be made for undertaking further studies.

1. The present study has been conducted on school-going boys, age ranging between 14-16 years. Similar studies may be conducted on female subjects of same age groups and both male and female subjects of other age groups.

2. The present study was carried out on three different sports disciplines. Similar studies can be undertaken on other sports disciplines.

3. Interesting findings may be available if similar studies are conducted on both male and female subjects of different age groups residing in other different air pollutant zones in West Bengal.

4. Similar research work may be undertaken on male and female subjects of different age groups under other different environmental conditions like, different water pollutant zones, different environmental temperatures and altitude from sea level.

5. Similar studies may be taken up using variables other than those selected for the present study.

6. Interesting findings may be available if assessment of physical fitness components are done when intake of different nutrients of boys of two zones will be same and above the ICMR standard.

7. Same parameters may be measured in boys of two zones after supplementation of macro and micronutrients of same amounts.