

**CHAPTER – 11**  
**CONCLUSION**

## CONCLUSION

Mean values of the most anthropometric characteristics significantly increased with age. Overall higher mean values of anthropometric characteristics were observed in children of industrial area than nonindustrial area. Industrial girls were taller than nonindustrial girls at the age of 6 and 7 years. Industrial girls were heavier than nonindustrial girls at the age of 7 years. It was found that in most of the anthropometric characteristics, the mean values were higher in boys of industrial area compare to nonindustrial area. 3, 8 and 10 years aged industrial boys were taller than nonindustrial area. 6, 8, 10 and 11 years aged boys of industrial area were heavier than nonindustrial area. Higher mean values of sitting height (for 3, 4, 10 and 11 years) and knee height (for 3 and 8 years) were observed in industrial boys compare to nonindustrial area. It was found that most of the anthropometric characteristics except skin fold the mean values were higher in boys than girls. Mean value of MUAC, HC, WC, BMI, and CI of 9 years aged children were sexually dimorphic in nonindustrial area. Mean value of triceps, biceps and sub scapular skin fold of boys and girls were significantly different at the age of 5, 10 and 11 years. It was found that in most of the anthropometric characteristics, the mean values were higher among the boys compared to girls in nonindustrial area. 10 years aged children were sexually dimorphic in respect of mean of height in industrial area. Sexual differences of sitting height of the children were observed at the age of 6, 9 and 10 years in industrial area. Children were sexually dimorphic at the age of 6 years in respect of mean values of MUAC. Difference between mean of HC was observed at the age of 5 and 6 years and 6 years children were sexually dimorphic in respect of mean of WC in industrial area. 5 and 9 years aged children were sexually dimorphic in respect of mean sub scapula skin fold and sexual difference was observed at the 5 years aged children of industrial area, in respect of mean value of BMI.

Educational status of parents of the industrial children was better than nonindustrial area. In nonindustrial area majority of the fathers of the children were labourers but in industrial area maximum fathers were depended on industrial job. Better economic condition was found in industrial area than nonindustrial area. In the studied area maximum family had own house but in industrial area some families were living in rental house. 43.48% participants of nonindustrial area were living under 2 (5-6 members) category of family members. But in industrial area 57.9% participants were living under 1 (1-4 members) category family members. 52.33% and 75.20%

children were living in 2 (2-4 room) categories of number of living room. Sanitary condition was better in industrial area than nonindustrial area. Maximum families of the industrial area used gas for their cooking purpose but in nonindustrial area families used different type of materials. Children of the two areas were suffering from communicable disease. 35% children were ill with in 3-5 months in nonindustrial area but in industrial area 44.77% children were ill with in above 6 month. 15.30% children got their medicine from Govt. service in nonindustrial area, which was higher prevalence than industrial area.

The present study shows that higher prevalence of CIAF (53.50%) among school aged children in Purba Medinipur, West Bengal. The prevalence of CIAF was significantly higher in nonindustrial area (59.40%) than industrial area (47.70%). Higher prevalence of three conventional indices was observed in nonindustrial area than industrial area. This study also shows that probability of child being undernourished increase with age. Age differences were found in all type of indices of undernutrition. No sex differences were found in three conventional indices except prevalence underweight of nonindustrial area. Socio-economic and demographic characteristics of two areas were significantly differ from each other. The present cross-sectional study assesses to determined impact of socio-economic, demographic and self reported morbidity on child nutrition in both areas. All participants of the nonindustrial area were under the supervision of the two national programmes (MDM, ICDS), although higher prevalence of undernutrition was found in nonindustrial children. This study presented risk factors of undernutrition were also different in two areas. Statistical analysis was used to determine the appropriate risk factors of undernutrition. Binary logistic regression analysis showed that prevalence of undernutrition was significantly associated with parental education, sanitation and fuel type in nonindustrial area. Those variables which showed significant associations in the binary logistic regression analysis were further tested to predict more effective predictor variables in the step wise multiple logistic regression analysis. The step wise multiple logistic regression analysis showed that mothers' education was significantly ( $p < 0.001$ ) associated with nutritional status of the children. However no statistically significant association was found with regard to family income and expenditure in nonindustrial area. As well as binary logistic regression analysis showed that prevalence of undernutrition was significantly associated with parental education, living room, monthly income and expenditure (per capita) in industrial area. Stepwise logistic regression showed that living room and income were significantly associated with prevalence of undernutrition within other probable factors. Prevalence

of undernutrition depended on only one factor mothers' education in nonindustrial area but in industrial area prevalence of undernutrition depended on two factors income and living room. Even income and living condition was better in industrial area than nonindustrial area.

Present study reported that maximum family of nonindustrial area had own house and adequate number of living room. Monthly family expenditure was lower than monthly family income. But family had no proper sanitary system. Maximum families did not used smokeless fuel for cooking. Parents were not highly educated that influenced on nutritional status of the children. Although in industrial area parents were highly educated and engaged with non manual work. Family had proper sanitary system and used smokeless fuel for cooking. But maximum families had no own house and adequate number of living room. Family expenditure was approximately equal to family income. That may be cause of child undernutrition in industrial area. Improved education and nutritional related knowledge at population level are necessary to improve nutritional status of children in nonindustrial area. Improved economic condition and condition of living room are needed to improve nutritional status among children in industrial area. Only the intake of adequate food is not a proper way to under control the prevalence of undernutrition of children.