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Haemopoetic, Serum Minerals and Intellectual Status of Institutionalized and Non Institutionalized Boys

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ABSTRACT A sample of 60 boys aged 10-12 years i.e. 30 living in institutions in Ludhiana and Amritsar (Group I) and 30 living in homes belonging to low socio economic group of Ludhiana (Group II) were selected. The average per capita income in group II was Rs. 437/- per month, whereas in the group I the authorities spent Rs. 500/- per month on each subject. The average Hb level in group I and II was 10.52 and 9.78 g/dl, respectively. The mean values of PCV, RBC count were higher in group I as compared to group II. The mean levels of serum iron, zinc in group I and II were 111.04 ± 17.1 and 74.73 ± 14.2 $\mu\text{g/dl}$ and 127.62 ± 53.4 , 67.19 ± 36.6 $\mu\text{g/dl}$, respectively. The intelligence quotient (IQ) level was intellectually superior in group I than group II. It was observed that IQ had significant ($P < 0.05$) correlation to Hb and serum iron, the value of 'r' being 0.49 and 0.46 respectively. Better hematological profile and IQ in group I was due to higher intake of all essential food items provided by authorities and people as a charity. However, majority of the subjects in group II were undernourished as their parents were unable to provide food in adequate amounts due to poverty and big family size. Thus the study indicated that food and environment are the two basic factors which affected the overall development of the children. So attention should be given to improved nutrition and happy environment.