PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608

JOURNAL OF HUMAN ECOLOGY

International Interdisciplinary Journal of Man-Environment Relationship

PRINT: ISSN 0970-9274 ONLINE: 2456-6608

J Hum Ecol, 32(2): 79-83 (2010)
DOI: 10.31901/24566608.2010/32.02.02

Assessment of Iodine Deficiency Disorders in School Age Children in Jodhpur dictrict of Rajasthan

Madhu B. Singh, Robin Marwal and J. Lakshminarayana

Desert Medicine Research Centre, New Pali Road, Jodhpur 342 005, Rajasthan, India

KEYWORDS Iodine. IDD. Goiter. School Children. Desert

ABSTRACT In the present paper magnitude of Iodine deficiency disorders(IDD), total goiter rate, nutritional deficiencies and their association with related factors have been studied. The sample of 105 school children (12-15 years) of Jodhpur district were assessed by clinical examination of thyroid gland using the standard method as recommended by the joint WHO / UNICEF / ICCIDD consultation, morbidities, Iodine in urine and salt using standard laboratory technique. Total goiter rate was 11.4 %, all of them had grade I goiter. The goiter prevalence in male and female was found to be 7.4 % and 15.7% respectively. The median urinary iodine excretion was 166.2 µg/l. Proportion of the children in severe grade (<20 µg/l) was 5.0 %. Overall high proportion of school children (81.5%) consumed salt having inadequate iodine content and proportion was significantly higher in females than males ($P<0.05$).The proportion of households consuming adequate iodized salt increased with decline of income. The proportion of households consuming adequate iodized salt increased with increase of housing conditions grades, found statistically significant. Sickness at the time of survey was 16.2 % and the overall morbidities observed were significantly higher in females (19.6 %) than males ($P<0.05$). Total goiter rate was high and only 18.5 percent of salt had adequate iodine content indicating that the consumption of iodized salt in desert area is extremely low in spite of the national programs in operation and needs more attention. In addition to iodization of salt, there is a strong need of formulating nutritional intervention packages for this region.