Abstract

Objective. To describe the epidemiology of iron, zinc and iodide deficiencies in a probabilistic sample of Mexican women and children and explore its association with some dietary and socio-demographic variables. Material and Methods. We carried out in 1999 an epidemiological description of iron (percent transferrin saturation, PTS, <16%), serum zinc (<65ug/dl) and iodide (<50 ug/l urine) deficiencies in a probabilistic sample of 1,363 Mexican children under 12 years and of 731 women of child-bearing age. Serum iron, Total Iron Binding Capacity (TIBC) and zinc were measured by atomic absorption spectrometry, and urinary iodide by a colorimetric method. Logistic regression models explored determinants for such micromineral deficiencies. Results. Iron deficiency was higher (67%) in infants <2 years of age. Prevalence declined (34-39%) at school age. The prevalence for iron deficiency in women was 40%. Zinc deficiency was higher in infants <2 years of age (34%) than in school-age children (19-24%). Prevalence in women was 30%, with no rural/urban difference. In women the likelihood of iron deficiency decreased as SEL improved (p=0.04) and increased with the intake of cereals (p=0.01). The likelihood of low serum zinc levels was greater in women and children of low socioeconomic level (SEL) (p<0.02 and p=0.001) iodide deficiency was negligible in both children and women. Conclusions. The data shows high prevalence of iron deficiencies especially in infants 12 to 24 months of age. It is suggested that in older children and women 12 to 49 years of age that iron bioavailability is low. The prevalence of zinc deficiency was also very high. The English version of this paper is available too at: http://www.insp.mx/salud/index.html

Keywords

iron deficiency; zinc deficiency; iodide deficiency; preschoolers; school-age children; women of child-bearing age; Mexico.