Abstract

To describe the frequency of anemia and iron, zinc, copper and magnesium deficiencies among Mexican adolescents in the probabilistic survey ENSANUT 2006. Materials and methods. The sample included 2,447 adolescents aged 12 to 19 y. Capillary hemoglobin and venous blood samples were collected to measure the concentrations of ferritin, sTFR, CRP, zinc, iron, copper and magnesium. Logistic regression models were constructed to assess the risk for mineral deficiencies. Results. The overall prevalence of anemia was 11.8 and 4.6%, body iron deficiency 18.2 and 7.9% for females and males, respectively. Overall prevalence of tissue iron deficiency was 6.9%, low serum copper were 14.4 and 12.25%; zinc 28.4 and 24.5%, magnesium 40 and 35.3%; for females and males, respectively. Conclusions. There is a high prevalence of mineral deficiency in Mexican adolescents; females were more prone to have more mineral deficiencies. Nutritional interventions are necessary in order to reduce and control them.

Keywords

Iron, zinc, copper, magnesium, Mexican adolescents.