Abstract

Objective. To describe the prevalence of serum iron and zinc deficiencies and low serum concentrations (LSC) of copper and magnesium in Mexican adults. Materials and methods. Blood samples from subjects (20 years, both genders) participating in the 2006 National Health and Nutrition Survey were used to measure the serum concentrations of s-ferritin, soluble-transferrin-receptor (s-TfR), zinc, copper, and magnesium. Results. The prevalence of s-ferritin<12ug/L was 18.1 and 3.6% while s-TfR>6mg/L was 9.5 and 4.4%, for females and males, respectively. The prevalence of zinc deficiency was 33.8% females and 42.6% males; LSC of copper were 16.8 and 18.2%, and 36.3 and 31.0% for magnesium, for females and males, respectively. Conclusions. The prevalence of deficiencies in iron (in females), and zinc are still high in the adult population. LSC of copper and magnesium are published for the first time and show significant prevalence of deficiencies. Corrective actions are necessary in order to diminish these nutritional deficits in the Mexican population.

Keywords

Minerals, iron, zinc, copper, magnesium, Mexico