PREVALENCE OF ZINC DEFICIENCY IN MEXICAN CHILDREN AND WOMEN OF CHILDBEARING AGE

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Background and objectives: Describe the prevalence of zinc deficiency (ZD) among Mexican children and childbearing age women from the National Health and Nutrition Survey2006 (ENSANUT-2006).

Methods: Serum Zn concentrations were determined in 3,964 children 1-11 y, and 2,421 women 12-49 y from ENSANUT-2006. ICP atomic emission spectroscopy was used for determinations. The IZiNCG cut of was used to define ZD. Analyses were adjusted for survey design.

Results: Prevalences of ZD were: 26.3% in 1-4 y, 26.9% in 5-11 y and 33.8% in women 12-49 y. No significant differences were observed in prevalences by sex, geographic region and ethnicity in all ages. Higher prevalences of ZD were observed in children 1-11y from rural areas (28.1 vs 25.9%), those belonging to the lower socioeconomic (SES) tertile (28.2 vs 23.6%), non beneficiaries of a Federal fortified (including zinc) milk distribution program (Liconsa) (29 vs 19%; p=0.05) and preschoolers non beneficiaries of Oportunidades (26.9 vs 23.3%). A higher prevalence was found in urban women (35.8 vs 29.2%) and those belonging to the lowest SES tertile (36.5 vs 31.7%). Results from the 2012 national survey, currently in the process of determination, will be presented.

Conclusions: The prevalence of ZD in Mexican children and women is a public health problem. There is a need to extend the distribution of micronutrient containing foods or preparations in children <5y and from the poorest areas. This is supported by two efficacy studies of fortified food which demonstrated a reduction of ZD prevalence.

Key words: Zinc deficiency, children, women, nutrition surveys.