

Effects of zinc supplementation on 1- to 5-year old children

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Objective: To assess the impact of zinc supplementation on nutritional and biochemical parameters among children aged 12 to 59 months. **Methods:** A blinded randomized clinical trial was carried out with 58 children aged 12 to 59 months included in the Programa Governamental de Combate a Carências Nutricionais (National Child Nutritional Program), which provided them with 2 kg of iron-fortified milk. The supplementation group (n = 28) received 10 mg/day of zinc sulfate for four months, and the control group (n = 30) received placebo. The following parameters were used to assess the nutritional status: weight-for-height and height-for-age expressed as z scores, according to National Center for Health Statistics (NCHS) standards, biochemical measurements of serum iron and serum zinc, and hemoglobin and hematocrit levels. **Results:** Zinc supplementation did not have a remarkable influence on anthropometric parameters. Baseline serum zinc levels were low in both groups. After supplementation, v