Thesis Title Zinc, Copper and Magnesium in health and diseases

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ABSTRACT

Reference intervals for serum zinc, magnesium and copper were determined by atomic absorption spectrophotometer (AAS) which is a standard reference method and the values obtained were 50.5-96.6 ug/dl, 1.21-2.25 mg/dl and 54.4-139.0 ug/dl, respectively. The results determined by AAS method were compared with the results obtained by colorimetric method and the correlation coefficient obtained for zinc, magnesium and copper were 0.926, 0.656 and 0.745, respectively, with values from colorimetric method higher by 5-10%. Moreover, we also determined the reference interval of these elements in hair by AAS and values of 22.0-174.0 ug/g, 4.8-32.1 ug/g and 8.89-75.6 ug/g, respectively were obtained. We concluded that the analysis of these elements in hair could not be used in the place of serum values for interpretation.