SOME TRACE ELEMENTS IN NORMAL PREGNANCY AND PREGNANCY INDUCED HYPERTENSION

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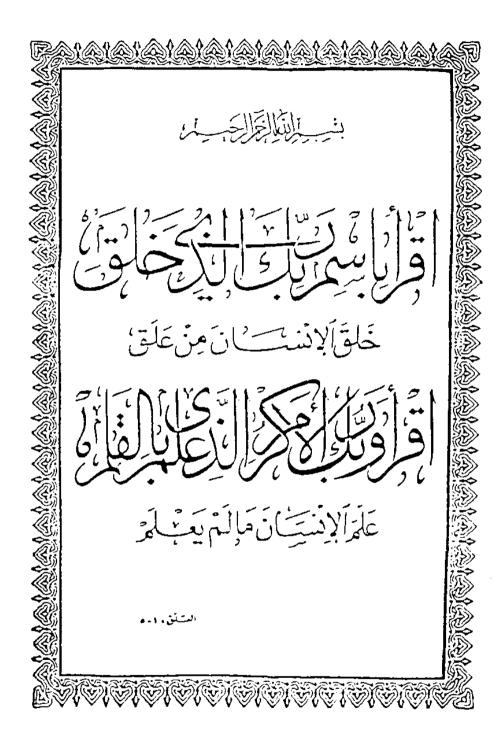
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INTRODUCTION

Trace elements have been defined as those metals whose total concentration in a 70 kilogram man is less than 4 grams. Studies of trace elements have been aided by the recent development of novel techniques such as flameless atomic absorption spectrophotometry, gad liquid chromatography, X-ray fluorescence and mass spectroscopy, which have allowed reliable measurement of several trace elements in different tissues.

However, progress has been hindered by factors such as the lack of convenient methods for handling of samples, initial expense of equipment, and difficulties with contamination of samples. in spite of these problems considerable physiological information about trace elements have been collected over the past few years. Of trace elements appearing in the body, 10 have been designed "essential" trace elements, Zinc, Copper, Manganese, Iodine, Cobalt, Molybdenum, Tin, Selenium, Iron and Chromium.

Deficiency of an essential trace element results in a characteristic deficiency syndrome in a manner analogous to a specific vitamin or hormone deficiency. the deficiency syndrome is associated with specific structural, functional, biochemical and physiological abnormalities. These, in turn, are prevented or reversed after administration of deficient element. Toxicity may result from excess of these essential trace elements. They perform functions essential to maintenance of life. Magnesium, manganese, Copper, Zinc, selenium and Cadmium have been studied most extensively in this work.

Excess or deficiency of these trace elements may have a pathogenic role in the development of pregnancy induced hypertension.

Introduction (1)



