Introduction and aim of the work

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Obesity is the major public health problem posses a serious threat to health and life (Keys et al., 1972). At the present time, obesity is considered the most common nutritional disorder in infants and children in well developed countries, and give more ill health than all vitamin deficiencies put together (Davidson, 1973).

The term "adiposity" is derived from the latin "Adeps" which means fat (Green, 1946), obesity refers to the excess deposition or accumulation of fat in subcutaneous and other tissues, and can be quantitated by measuring skin fold thickness with calipers (Barness, 1983).

A large majority of obese individuals, however, are fat because they eat more food than they burn up, the rate of release of fatty acids from adipose tissues is affected by many hormones that influence either the rate of lipogenesis, or the rate of lipolysis. Insulin plays a prominent role in the regulation of adipose

tissue metabolism, and it has pronounced antilipolytic effect and antagonises the effect of lipolytic hormones. Cyclic AMP acts in promoting lipolysis. Also, thyroid hormones facilitating lipolysis by augmentation of cyclic AMP, and inhibition of phosphodiestrase activity. Growth hormone (Ant. Pituitary hormone) Promots lipolysis as well, which is dependant on new formation of protein involved in the formation of cyclic AMP. Glucocorticoid hormone (Cortisol) evokes the adipkinetic properties of growth hormone (Mayes, 1985).

The aim of this work is to study the hormonal profile that regulates adipose tissue and lipid metabolism in obese infants, and children.