

INTRODUCTION AND AIM OF WORK

Overweight is an increase of body weight above some arbitrary standards defined in relation to height . To be obese means to have an abnormally high proportion of body fat . (Bray 1989) . Several studies suggest a progressive increase in the weight for height ratio throughout the past century .

(Garrison and Kannel 1993)

The chief cause of death among obese people is cardiovascular disease , myocardial infarction, congestive heart failure and hypertension all are significantly more prevalence among obese people than among people of normal weight . The prevalence of hypertension was much higher in obese as compared to non-obese children (13.7 % . VS 0.4 %) (Verma et al 1994) .

A number of studies in recent years have documented an increase in both the prevalence of obesity in children and its severity (Savage et al 1990) . Forty percent of obese children suffer from personality disturbances , the observed main types of disturbances were depression and anxiety (Tadiello et al 1990) . Only few reports have studied the effects of obesity on the cardiovascular system in children (De Simone et al 1992) .

In a recent work published by Kono et al in 1994 there was significant correlation between indices of obesity and left ventricular internal dimensions or left ventricular mass .

The aim of this work is to evaluate the effect of obesity on the functional and structural parameters of the heart determined by echocardiography in a group of obese children attending the Diabetic Endocrine Metabolic Pediatric unit of Cairo University Children Hospital .