A Case Study



# Anthropometric assessment and BMI index of obese children in Kanpur district of Uttar Pradesh

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The word obese is derived from the Latin word "obese" which means "to eat". Obesity occurs when a positive balance develops between the energy intake and expenditure. The obesity in children and adolescents is gradually becoming a major public health problem. Obese children are those who are 20 per cent above the normal weight for age. They are more prone to become overweight adults as the tendency of obesity in such children persists throughout the life. The risk of obesity is two to three times greater for an individual with a family history of obesity and increases further with severe obesity. In addition infants born to overweight mothers have been found to be less active and gain more weight by age three months when compared with infants of normal weight mothers suggesting a possible inborn derive to conserve energy. Childhood obesity has emerged only recently in India, unlike in the West where it existed since long. Obesity in children as young as two years onwards have been reported from the Indian population (Sharma, 2002). The present study was planned to investigate anthropometric profile in the obese children.

### Location of study:

The study was conducted in Government School Kanpur District of Uttar Pradesh in 2007.

### Selection of subject:

Statistically adequate samples of 100 subjects in the

group of 8-13 yrs were randomly selected from Govt. Schools in Kanpur District of Uttar Pradesh.

### **Collection of data:**

A well- structured questionnaire-cum-interview schedule was developed to elicit the information of adolescent girls.

### Nutritional status:

Nutritional status of obese children was assessed by Anthropometric measurement *viz.*, height, weight, BMI, MUAC and TST.

#### Anthropometric assessment:

Measurement of body weight, body height, BMI, midupper arm circumference (MUAE) triceps skin fold thickness were recorded by the technique suggested by (Gibson, 1990).

### Technique for measuring body weight:

A weighing machine with maximum capacity of 120 kg and the minimum division of 0.5 kg was used to weight the subject.

### Technique for measuring body height:

Height was measured with vertical measuring rod (anthropometric). The anthropometric rod with centimetre scale having least count of 0.1 cm was used for measuring