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A STUDY OF SOME OF THE FACTORS AFFECTING CHILDHOOD OBESITY

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The objective of this study was to identify factors associated with childhood obesity among a selected population of Sri Lankan children. One hundred and nineteen families (186 children below 12 years) were included in the study.

Bio-data of the family members were obtained by interviewing. Weights were measured using a bathroom scale (sensitivity - 250g), height was measured using a simple device made for the study and the skin fold measurements were made with a Harpenden skin fold calliper.

The weight expressed as a percentage of the reference weight to age and sex was considered as a measurement of obesity in children. Children whose weight exceeds 120% above the upper reference value were labelled obese. Reference weight were from the weight to age chart of the child health development record issued by the Family Health Bureau of the Ministry of Health and the weight to age and sex chart by Aponso (1991), for the age groups of 0 - 60 months and 5-12 years respectively.

Multiple correlation analyses were used to assess the correlation between weight expressed as a percentage of reference weight and certain other variables which were treated as continuous. Secondly student's t - test was used to compare the mean values of some factors of obese and non obese children.

Maternal body mass index ($P < 0.01$), maternal weight ($p < 0.0001$), maternal biceps ($P < 0.01$), maternal triceps ($P < 0.0001$), paternal weight ($P < 0.01$), and paternal biceps ($P < 0.05$) were positively correlated with childhood obesity. The weight of the children (as a percentage of the reference) correlated negatively with family size and intake of rice, and positively with intake of meat. It also tend to increase with the increasing maternal educational level. The only useful factor that was highly correlated with measures of childhood obesity was parental weight.

In families with either one or both parents are obese, emphasis should be placed in the adoption of measures to prevent the development of obesity in children.

References

Aponso.H.A. (1991). Weight charts of children. Your child and your family.