

## **Birth Weight, Weight Gain and Feeding Pattern as Predictors for the Onset of Obesity in School Children**

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Obesity is a global health issue. Early identification is essential to plan interventions and to intervene than to reduce the worsening of obesity and its consequences on the health of individuals. The present study was conducted to identify the age of onset of childhood obesity and the influence of birth weight, weight gain, and feeding patterns as predictors for the onset of obesity among school children living in a suburban area of Sri Lanka. The study population was aged 11-12 years from the Piliyandala Educational Zone. The data was collected from 11–12-year-old school children attending government schools in the Piliyandala Educational Zone using a validated, pre-tested self-administered questionnaire separately for the participant and the guardian and using the Child Health Development Record of the child. For each obese child identified; 2 non-obese children were selected as controls. The results of the present study aligned with the hypothesis that the age of onset of childhood obesity must be within the first two years of the life a child. A total of 130 children (66 males: 64 females) participated in the study. The age of onset of obesity was observed to lie within the first two years of life. Obesity risk was identified as 3-times higher among females who underwent rapid weight gain during their infancy period. Consuming milk prior to breakfast emerged as a risk factor that increases the risk of obesity by three times. The current study found that the drinking before breakfast tends to increase the obesity risk by 3-folds, especially among obese-females. Proper monitoring must be carried out to identify the rapid weight gain, specially within the first 2 years of life. Consumption of a mug of milk before breakfast tends to increase the obesity risk by 3 times. Identification of the confounding factors, proper awareness of the mothers/guardians and effective proper interventions need to be carried out to reduce the obesity risk among school children in the future.

**Keywords:** *childhood obesity, school children, age of onset, weight gain, feeding pattern, activity level*