

Nutritional Status of Adolescent Bengalee Boys

Anthropometry has been used during adolescence in many contexts related to nutritional status. It has now well established that the body mass index (BMI) is the most appropriate variable to use to determine nutritional status among adolescents(1). Several recent studies have investigated nutritional status of adolescents from different parts of India(2). However, there is very little information on the nutritional status of adolescent boys from urban West Bengal. The present study was undertaken to study the level of undernutrition among 10-16 year old Bengalee boys of Nimta, North 24 Parganas, a suburb of Kolkata.

Data were collected from a boys' secondary school situated in an urban area within the North Dum Dum Municipality about 20 kms from Kolkata city center. Verification of age and ethnicity were done from the school records, as well from the answers to specific questions in the questionnaire which was completed by every subject. A total of 502 students, aged 10-16.9 years were randomly selected and studied. The subjects were classified into seven age groups: 10-10.9 years (n = 74), 11-11.9 (n = 53), 12-12.9 (n = 87), 13-13.9 (n = 116), 14-14.9 (n = 58), 15-15.9 (n = 57) and 16-16.9 (n = 57).

Height and weight measurements were made by a trained investigator (AM) following the standard techniques(3) and body mass index (BMI) was computed.

Nutritional status was evaluated using the World Organization(1) recommended age-specific cut-off points of BMI based on the National Health and Nutrition Examination Survey (NHANES) percentile values(4). Undernutrition (thinness) was defined as BMI < 5th percentile values of NHANES. This cut-off point has been utilized by several recent studies worldwide on undernutrition among adolescents.

The overall rate of undernutrition was 37.65%. The rates of undernutrition varied between 19.3% among 16 years olds to 53.4% at age 14 years. There was a consistent increase in the rate of undernutrition from 10 (36.5%) to 14 years (53.4%). Thereafter, there was a steady decline at ages 15 (36.8%) and 16 (19.3%) years.

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