

# International Conference and Exhibition on **Nutritional Science & Therapy**

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## **Nutritional status of tribal adolescents in rural south India, the effect of an ngo delivered nutritional programme**

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**Aims & Objectives:** To investigate the prevalence of malnutrition using anthropometric measures in a late childhood and adolescent cohort of tribal students attending a local non-governmental(NGO) school in Biligiriranga Hills Tiger Reserve(BR Hills), rural India. Children attending the school received a minimum of two meals per day. A comparison of the nutrition status of 'new' and 'old' students at the school was intended to assess the nutritional quality of the meals provided.

**Methods:** The nutritional status of 409 students was assessed by comparing anthropometric measurements to reference values according to WHO/NCHS current reference guidelines[1]. 'New' students were defined as having attended the school for less than 1 year, with older students attending the school for at least one year.

**Results:** The overall prevalence of thinness was 39.4%. Thinness was most prevalent at 12 years of age. 59.5% of new and 52.9% of old students at the school demonstrated thinness. 59.4% of students were classified as stunted with high rates being present from 9-11 years. 73.8% of new students and 52.9% of old students were stunted ( $p=0.091$ ). Significantly ( $p=0.010$ ) more new female students were classified as stunted.

**Conclusions:** This study suggests that acute and chronic measures of malnutrition are high amongst adolescent students attending the school. Comparison between the new and old adolescent pupils at the NGO School hints that older students are less malnourished than their newer counterparts. This study demonstrates the importance for NGOs serving rural populations to develop their nutritional programmes with a special focus on adolescents.

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